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ABSTRACT

The New York State Annual Report for Occupational Education, Fiscal Year 1975, contains a narrative description of the State's accomplishments in terms of the objectives of the State Plan for Administration of Occupational Education, as well as a statistical overview of the State's occupational education programs during the fiscal year. Data are organized into five major sections, according to the instructional level of persons served: elementary and early secondary, secondary, postsecondary, adult, and multilevel. The secondary, postsecondary, and adult sections are further subdivided into three population groups served: general, disadvantaged, and handicapped. Throughout the reports specific programs and services are described to show how resources were utilized to accomplish objectives. Additional descriptions of exceptional or model programs are presented for the secondary, postsecondary, and adult levels. A variety of goals which have implications for all educational levels are described in the multilevel section. The elementary and early secondary section describes career education activities and the regional career education models. (Author/MF)

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new york state annual report for occupational education

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fiscal year 1975

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Office of Occupational and Continuing Education
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THE UNIVERSITY OF THE STATE OF NEW YORK
The State Education Department
Office of Occupational and Continuing Education
Albany, New York

NEW YORK STATE
ANNUAL REPORT FOR OCCUPATIONAL EDUCATION

July 1, 1974 - June 30, 1975

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INTRODUCTION

The New York State Annual Report for Occupational Education, Fiscal Year 1975, contains a narrative description of the State's accomplishments in terms of the objectives of the fiscal year 1974 State Plan for the Administration of Occupational Education under the Vocational Education Amendments of 1968, as well as important statistical information concerning the status of occupational education in the State during the fiscal year.

All information concerning accomplishments of State Plan objectives is organized into five major sections, according to the instructional level of persons served: ELEMENTARY AND EARLY SECONDARY, SECONDARY, POSTSECONDARY, ADULT, and MULTILEVEL. The SECONDARY, POSTSECONDARY, and ADULT sections are further subdivided into three population groups served: GENERAL, DISADVANTAGED, and HANDICAPPED. Throughout the report, descriptions are included of specific programs and services which exemplify ways in which resources were utilized to accomplish objectives. Additional descriptions of specific programs and services are included in the section entitled HIGHLIGHTS OF EXCEPTIONAL OR MODEL PROGRAMS.

Information concerning accomplishments of objectives for the narrative portion of the report was compiled from: statistical reporting data; annual reports furnished by directors of occupational education in the major cities and BOCES area centers; materials from public 2-year colleges, educational opportunity centers, and the Bureau of Two-Year College Programs in the State Education Department; and from records of various State Education Department units with responsibility for occupational education.

The ELEMENTARY AND EARLY SECONDARY section describes career education activities and the regional career education models at the completion of their third and final year of VEA funding.

Among the wide variety of accomplishments described in the SECONDARY section are: the addition and expansion of occupational programs to meet identified manpower needs; utilization of new instructional methods including autotutorial lessons; development of special demonstration projects relating to innovative practices in occupational education; further development of cooperative work experience and work-study opportunities; increased coordination and articulation of secondary and postsecondary programs; further development of programs and services for disadvantaged students, such as flexible scheduling and programming, and multioccupational curriculums designed to create and maintain student interest; and expanded services for handicapped students, including renewed emphasis on mainstreaming--serving the handicapped in regular programs supplemented by special services, and/or preliminary exploratory and orientation programs.

At the POSTSECONDARY level, significant accomplishments include: development of 22 new occupational curriculums, and expansion of 96 existing curriculums; expansion of guidance and counseling functions; creation of developmental skills programs in reading and mathematics to assist students in successfully completing occupational programs; development and implementation of new individualized instructional techniques and materials to assist students in succeeding; initiation and expansion of articulation efforts between 2-year public colleges and secondary agencies; further development of cooperative work experience as an integral part of occupational curriculums; and development of programs and services for disadvantaged and handicapped occupational education students.

Major accomplishments described in the ADULT section include: continued efforts to provide flexible scheduling arrangements and short-term programs which allow adults to enroll in day or evening programs with a minimum of conflict with their other responsibilities; addition of programs to upgrade the skills of employed adults; development of programs to meet specific needs of local businesses or industries; further development of related instruction programs for apprentices in cooperation with local unions; more intensive counseling and diagnostic testing of adults, out-of-school youth, and high school dropouts; expansion of modular curriculum design in adult programs; introduction of self-paced learning packets; cooperative arrangements between BOCES and 2-year public colleges in serving adults; and increased emphasis on training and upgrading in the health occupations where job openings currently exist.

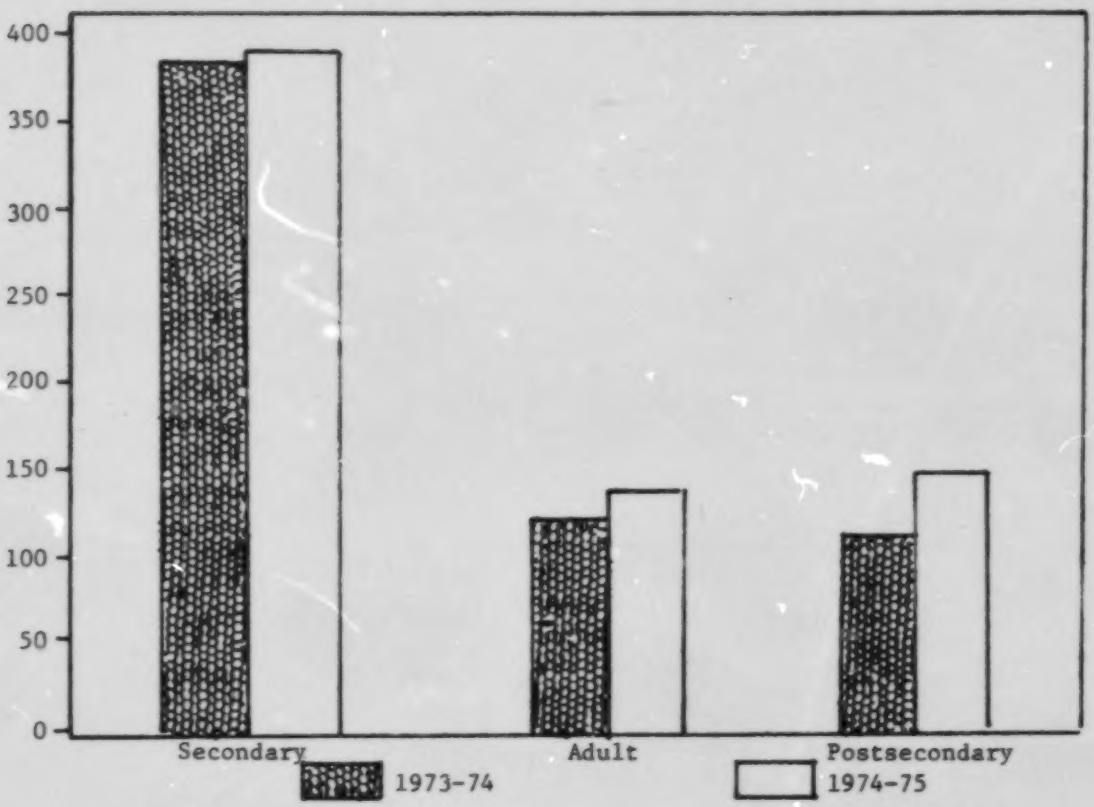
The MULTILEVEL section describes accomplishments in terms of objectives which have bearing on two or more educational levels. These objectives concern administration, research, planning, evaluation, exemplary programs, teacher education, guidance and counseling, and curriculum development. Some of the accomplishments described in this section are: continuation of the development of a comprehensive management information system for occupational education; continued operation of two Research and Development Institutes where special research studies are conducted, and consultive services provided which relate to needed change in the field of occupational education; employment of regional industry-education coordinators to improve two-way communication between educators and employer and employee groups; development of an improved arrangement for curriculum development, through the employment of regional curriculum coordinators in many areas of the State; operation of articulated career guidance models and expansion of guidance and placement services; and strengthening of teacher education efforts.

This introduction has summarized highlights of the narrative portions of the fiscal year 1975 Annual Report. The section which follows provides a statistical overview of the State's program of occupational education during 1974-75, in terms of the numbers and characteristics of students served.

STATISTICAL HIGHLIGHTS OF OCCUPATIONAL EDUCATION IN NEW YORK STATE 1974-75

During the 1974-75 school year, a grand total of 656,875 students were served in secondary, postsecondary, and adult occupational education programs at local public schools, at area occupational education centers operated by the Boards of Cooperative Educational Services (BOCES), and at the public 2-year colleges and educational opportunity centers located throughout New York State. This school year's occupational education enrollment surpassed the previous year's total occupational education enrollment by nearly 25,000 students, a growth rate of about 4 percent.

COMPARISON OF 1973-74 AND 1974-75 OCCUPATIONAL EDUCATION ENROLLMENTS



A significant factor in this continued growth was the increased availability of Federal assistance under the Vocational Education Amendments of 1968 (VEA). During fiscal year 1975 New York State expended $29,147,529 of VEA funds. This, however, represented less than 10 percent of the total Federal, State, and local expenditures for occupational education in New York State during the fiscal year.

SECONDARY

Virtually the same number of students, 386,872, were served in secondary occupational education programs during the 1974-75 school year as were served during the previous school year. Declining enrollment in public schools and a slowing in the acceleration of student participation in occupational education programs were key factors contributing to this year's leveling off of occupational education enrollments at the secondary level. Nevertheless, the distribution of enrollments among major agency types, program areas, and especially programs underwent significant modification.

URBAN

The greatest enrollment advances, among major agency types at the secondary level, were in the five major cities of the State--Buffalo, Rochester, Syracuse, Yonkers and New York City. Total occupational enrollment in these cities climbed to 153,466 students, a growth rate of nearly 5.5 percent. Moreover, the major cities' relative share of total secondary occupational education enrollment almost reached 40 percent, an increase of about 2 percent from the past year despite the exclusion of Albany as a major city.

All of this increase plus more is accounted for by a substantial increase of more than 10,000 enrollees in business and office education, the largest program area in the five major cities. Further examination revealed general office--clerical and typewriting and bookkeeping and accounting curricula to be the main benefactors of the rise in enrollment. Notably, however, the program stenographic, secretarial, and related occupations showed a sharp decline of nearly 5,000 persons or 28 percent of its previous year's enrollment. Enrollment fluctuations among other programs resulted in gains for distributive, agricultural, and trade, industrial, and service education, while technical, health occupations, and home economics education experienced declines.

Enrollment gains in general merchandising, general sales or sales-supporting and advertising services accounted for an increase of 1,600 enrollees in distributive education, the third largest program area offered by the major cities. Increased enrollment due to new programs in automotive and petroleum, finance and credit, food distribution, real estate, and recreation and tourism, however, were more than offset by a decline of greater than 400 enrollees in transportation and service programs.

New programs in agriculture production and agriculture products along with greatly expanded enrollments in ornamental horticulture and conservation resulted in a more than doubling of enrollments in agriculture education, the smallest of all program areas in the five major cities. Almost all of the increase originated in the New York City area.

Despite enrollment advances among the vast majority of trade, industrial, and service education programs, the second largest program area showed only a slight increase in total enrollment of eight-tenths of a percent. This was due to large offsetting enrollment declines in prevocational curriculums and textile production and fabrication programs and to a lesser extent graphic arts. The dramatic decline in prevocational enrollment reflects the application of more stringent classification criteria designed to delete enrollees who would be more appropriately classified nonoccupational; whereas, the latter declines portray an enrollment shift away from training and/or education in occupational fields which are characterized by rapidly declining employment opportunities. New secondary programs in the instructional areas of law enforcement training and public service occupations were added to this program area by the major cities during the past school year.

An abrupt decline of nearly 4,000 enrollees in technical education can be partly traced to dramatic enrollment decreases in aeronautical, agricultural, and architectural technologies and partly to the revised criteria for determining occupational enrollments in prevocational and pretechnical curriculums.

Most programs offered in health occupations education experienced declining enrollment as overall enrollment declined by 1,500 students or about 20 percent of the previous year's enrollment. Moreover, the sum of enrollment declines across all programs exceeded the overall enrollment decline due to the addition of a new program classification entitled pretechnical curriculums which counterbalanced the loss of another 1,500 enrollees. Nurse assisting (aide) showed the greatest absolute decline in enrollment by dropping more than 900 students while dental assisting enrollees declined by about 85 percent from the previous year.

An enrollment decline in home economics education of approximately 500 enrollees can be traced to a reduction of more than 800 students in food management, production, and services programs conducted in New York City. Enrollment gains in prevocational curriculums and clothing management, production, and services more than offset simultaneous losses in care and guidance of children and other occupational preparation programs.

REST OF STATE

Outside the major cities, 182,422 students, or about 47 percent of the total secondary occupational enrollment were served in programs operated by local public schools and 51,004 students or 13 percent of the same total, were served in programs operated by BOCES. By this count, BOCES relative share of total secondary occupational education enrollment declined by an apparent 1.4 percent from the previous year. However, changes in the configuration of agency data caused the decline among BOCES to be overstated. There were two instances, one intentionally, one not so, where agencies whose enrollment were formerly included as BOCES are now included among local public school enrollment by the 1974-75 occupational education enrollment reports. This resulted in a substantial shift of enrollment between the two major educational agency classifications because the affected agencies served 5,400

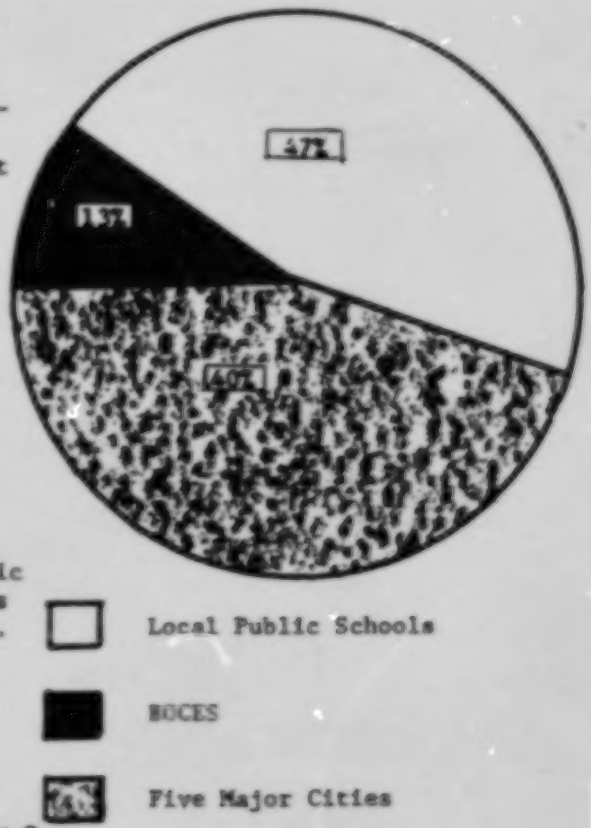
secondary students during the previous school year. By making last year's agency configuration compatible with this year's, BOCES show only a slight decline from an adjusted 51,086 enrollees during the 1973-74 school year to 51,004 enrollees during the 1974-75 school year. Thus, BOCES relative share of total public secondary occupational education enrollment remained virtually constant.

In addition to the enrollment shift caused by the agency reclassifications, the city of Albany was added to the roster of local public schools after relinquishing its former major city status, bringing the total gain of occupational enrollees by local public schools to nearly 7,000 students. Improved unduplication of enrollment data in stenographic, secretarial, and related occupations curriculum, however, counterbalanced all of the spurious enrollment gains attributable to the reclassified educational agencies. Overall, local public schools lost 2,412 occupational enrollees during the 1974-75 school year causing their relative share of total public secondary occupational education enrollment to shrink by about six-tenths of a percent.

Although enrollment declined at local public schools in agriculture; technical; and business and office education during the 1974-75 school year, the decline in the latter program area was almost twice that of the overall local public school decline. A particularly marked decline of about 7,000 enrollees in stenographic, secretarial, and related occupations curriculum was most significant. Enrollment levels for other business programs oscillated about last year's levels.

The best part of the relatively small enrollment decline in technical education happened in prevocational curriculums and mechanical technology. As mentioned earlier, enrollment declines in programs of the former kind are largely due to more stringent classification criteria. The decline in the latter program was a result of several local public schools, most prominently Dutchess County local public schools, who discontinued offering this program during the 1974-75 school year. However, local public schools added several new programs in technical education last year including electromechanical technology, environmental control technology and oceanographic technology.

DISTRIBUTION OF PUBLIC SECONDARY OCCUPATIONAL ENROLLMENT AMONG MAJOR AGENCY TYPES, 1974-75 SCHOOL YEAR



Enrollment in agriculture education declined in a similar manner as prevocational curriculums and agriculture production programs showed enrollment declines which accounted for the entire decline in the overall program area.

Among those program areas showing enrollment advances at local public schools, home economics education was the fastest growing program area due to enrollment increases in every program which resulted in a near doubling of total enrollment.

Enrollments in distributive education showed an above average growth rate which can be traced to a tremendous jump in the number of advertising service enrollees. However, this advance was solely due to more complete reporting on the part of local public schools in Nassau County and not actual growth in enrollment. In fact, deleting those agencies' enrollment for the past 2 years would cause a decline to appear in both the program and program area enrollment.

New programs in home health assisting and mental health were added to the roster of offerings in health occupations education yet the entire enrollment increase in the overall program area was attributable to sharp advances in the number of nursing, licensed practical and nurse assisting (aide) enrollees. Slight enrollment declines in existing programs offset the added enrollment in the new program offerings.

Enrollment at local public schools in trade, industrial, and service education programs showed a modest increase despite a significant decline in prevocational curriculums and frequent oscillations about the previous year's enrollment level among many other programs. The most noteworthy declines appeared in graphic arts, automotive services, and textile production and fabrication; reflecting the rapidly declining demand for many of the occupations derived from these kinds of training and/or education. The more prominent enrollment advances were scored in electrical occupations, construction and maintenance trades, machine and metal industries and quantity food occupations.

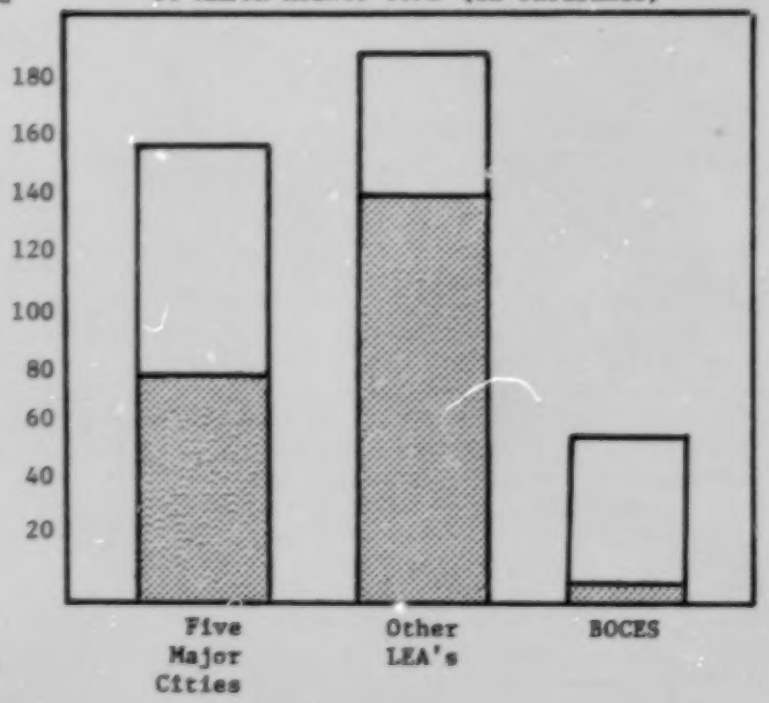
During the 1974-75 school year, BOCES served 51,004 secondary students, virtually unchanged from the previous year's adjusted enrollment. Excluding business and office education programs, which are a standard part of the curriculum in nearly every secondary school of the State, 52 percent of the occupational education enrollees outside the five major cities were served by BOCES.

Health occupations education, the second largest program area, showed an absolute enrollment gain despite sharing in the loss of enrollees due to the agency realignment. Most programs in this program area exhibited modest enrollment advances, with licensed practical nursing programs accounting for the largest single enrollment gain.

Agriculture education, next in enrollment size after the above program area, was also characterized by an absolute enrollment gain. Most programs in this program area gently oscillated about their enrollment levels of a year ago. In fact, increased enrollment in this program area was solely attributable to enrollment growth in ornamental horticulture programs.

Enrollment in all remaining program areas showed a modest decline. However, the new agency configuration was the cause of virtually all of the enrollment decline among trade, industrial, and service education as well as business and office education. Furthermore, more than half of the total enrollment decline in distributive and technical education was also attributable to this year's configuration of agencies. The enrollment decline in distributive education happened almost entirely within general merchandising, general sales, or sales-supporting programs but can be only partly traced to the agency deletions. Likewise, the enrollment drop in technical education can be partly traced to a decline in a single program, automotive technology, and partly to the deleted agencies.

COMPOSITION OF SECONDARY OCCUPATIONAL EDUCATION ENROLLMENTS, BY MAJOR AGENCY TYPE (In Thousands)



An enrollment decline of nearly 600 students in home economics education was unaffected by agency deletions and was concentrated in prevocational curriculums and occupational programs, other.

POSTSECONDARY

Community colleges and 2-year agricultural and technical colleges served 79,135 students in full-time degree occupational programs while another 59,720 persons were served in part-time degree occupational programs. This is nearly an 18 percent increase in postsecondary enrollment over the previous year, by far the fastest growing component of the public occupational education delivery system. Enrollment in all of the major program areas shared in the growth of full-time and part-time enrollment. However, program areas did not share equally nor did programs comprising a program area share alike. In fact, despite such rapid overall growth some programs exhibited enrollment declines.

FULL-TIME DEGREE STUDY

Among full-time enrollments, the greatest share of overall growth accrued to the largest program area, business and office education. The added enrollment was dispersed somewhat proportionally among all the programs which comprise this program area except for a disproportionate increase of nearly 2,000 enrollees in supervisory and administrative management offerings.

The next largest program area, health occupations education, received a disproportionately small share of enrollment growth as most programs in this category fluctuated modestly above or below their enrollment level of a year ago. Both dental assisting, exhibiting a dramatic decline and medical lab, displaying a sizeable enrollment increase were exceptions.

Technical education continued to grow rapidly as most of its programs showed moderate enrollment advances. Both mechanical and electronic technologies showed much higher than average enrollment advances, while enrollment in automotive technology declined sharply. The continued rapid growth of this program area at the postsecondary level has caused it to draw even, in terms of total enrollment, with trade, industrial, and service education.

Enrollment in trade, industrial, and service education showed about average growth for this level of occupational instruction, however, individual growth patterns of particular programs were quite volatile. Enrollment in automotive services and textile production and fabrication programs tripled and doubled respectively. Meanwhile, enrollment in drafting and graphic arts programs declined by more than half.

Agriculture education showed an above average growth rate despite a moderate enrollment decline in its largest single program, agriculture production. Enrollment in conservation programs showed the fastest growth. Enrollment gains in ornamental horticulture also contributed to the overall growth of this program area.

Enrollment in home economics education increased at an average pace despite dropping home furnishings, equipment and services programs. The entire enrollment increase was concentrated in a single program, care and guidance of children.

Distributive education displayed the slowest growth of all program areas at this level both in terms of relative and absolute enrollment increase. Expanded enrollment in advertising services was largely offset by declines in finance and credit and general merchandising, general sales, or sales-supporting. Modest enrollment gains in the remaining programs contributed to the small enrollment increase in this program area.

PART-TIME DEGREE STUDY

Enrollment in part-time degree study increased nearly 30 percent, or almost three times as fast as full-time degree enrollments. Enrollment trends among part-time enrollees generally resembled those found among full-time enrollees but were not identical. The greatest share of increased enrollments at this particular level of study was in the largest program area, business and office education. Both bookkeeping and accounting and supervisory and administrative management programs showed growth rates in excess of 50 percent. Distributive education expanded its enrollment by more than 20 percent as enrollment in advertising services programs more than quadrupled. Agriculture education enrolled a similar number of students this year as last and their distribution among the various agriculture programs changed little. Enrollment in home economics education nearly doubled as a result of a near doubling of enrollments in care and guidance of children. Moderate enrollment growth in health occupations education was due to enrollment gains in most programs but especially medical lab, which contributed the largest absolute enrollment gain and ophthalmic dispensing, whose enrollment more than tripled. At the same time, significant enrollment declines characterized dental assisting and dental hygiene programs. Technical education surpassed its previous year's enrollment by more than 50 percent as every program except industrial technology showed substantial enrollment gains. Enrollment in trade, industrial, and service education increased by nearly 20 percent despite substantial enrollment declines in graphic arts, law enforcement training and construction and maintenance trades. The near doubling of enrollment in educational paraprofessional programs along with a substantial rise in the number of social service paraprofessional enrollees were the major factors contributing to enrollment growth in this program area.

ADULTS

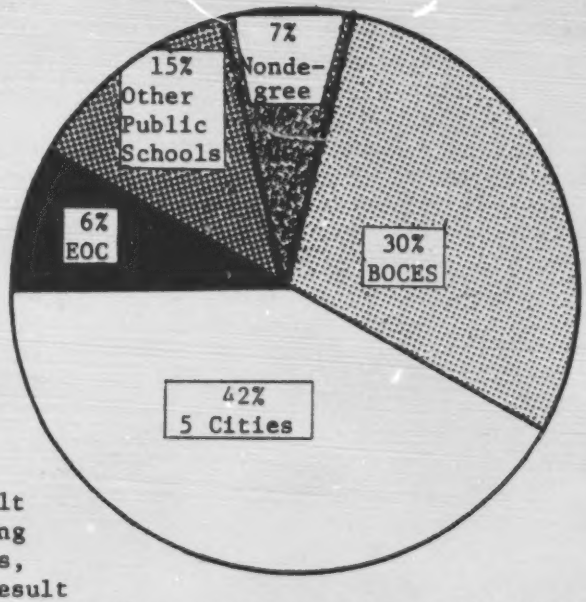
Public occupational education programs within the formal educational system--including public schools, BOCES, the 2-year colleges, and educational opportunity centers--which are designed to provide training or retraining to insure employability, advancement, job security, or mobility of persons who have already entered the labor market and who are either employed or seeking employment served 131,148 adults during the 1974-75 academic year, a modest growth rate of about 3 percent. Programs of this type form one component of the total system of opportunities for adults in New York State. This larger system includes government sponsored manpower training programs, especially those established under the Comprehensive Employment and Training Act (CETA); the proprietary occupational schools, and the extensive training opportunities offered by employers within business, industry, and government.

FIVE MAJOR CITIES

Training in adult occupational education programs in the five major cities reached 56,384 persons, an increase of nearly 10 percent. All of the growth was concentrated in New York City; whereas, the other four major cities exhibited moderate enrollment declines. The exclusion of Albany had a minimal impact on the overall level of adult enrollments in the major cities.

The magnitude of New York City's relative share of overall enrollment in every program area allowed enrollment fluctuations in New York City to determine the behavior of overall enrollment fluctuations in every program area for all five major cities combined. For example, a precipitous enrollment decline in adult conservation programs in New York City alone caused enrollment in the entire program area of agriculture education for all major cities combined to plummet. Likewise, a steep enrollment decline in distributive education for all major cities combined can be traced to the termination of transportation and service programs in New York City.

DISTRIBUTION OF ADULT OCCUPATIONAL EDUCATION ENROLLMENT ACCORDING TO AGENCY TYPE 1974-75



The overall distribution of adult enrollments in the major cities, among program areas and particular programs, exhibited considerable change as a result of significant and basic changes in the distribution of enrollments in other major cities as well. Moreover, for the most part, changes in adult enrollment patterns were inconsistent among the various major cities. Presumably, this reflects regional variations in demand among the local labor markets for particular skills.

OTHER PUBLIC SCHOOLS

The number of adults served in occupational education programs operated by local public schools totaled 19,382 persons, remaining relatively unchanged from the past year.

Nonetheless, the distribution of enrollments among program areas changed significantly as most program areas experienced declining enrollment despite the overall stability of enrollment. Only business and office education, the largest program area, and health occupations education benefited from the shifting enrollment patterns. Enrollment gains were dispersed rather

evenly among all business programs including an added program, supervisory and administrative management. The increase in health occupations education can be traced to significant enrollment growth in licensed practical nursing programs. Sharply reduced enrollments characterized agriculture and technical education programs although the largest absolute enrollment decline was in trade, industrial, and service education. The greatest single enrollment drop happened in textile production and fabrication programs.

BOCES

Concurrently, 38,556 adults were served in occupational education programs operated by BOCES, a slight decline of about 2 percent. Enrollment losses due to the agency realignment, mentioned earlier, were more than offset by the inclusion of adult enrollment at Nassau VEEB this year. Therefore, the slight decline of adult enrollments at BOCES is attributable to frequent oscillations about last year's enrollment levels among most BOCES.

Despite the slight decline among adult enrollments at BOCES, health occupations and business and office education exhibited enrollment growth. This, coupled with abrupt declines in home economics and technical education, altered the distribution of adult enrollments among the various program areas. Specific programs exhibiting sharp enrollment advances included dental assisting; licensed practical nursing; medical emergency assisting; and general office--clerical and typewriting. Programs exhibiting abrupt enrollment declines included automotive and electrical technologies; food management, production, and services; recreation and tourism; and agricultural mechanics.

NONDEGREE STUDY

Public 2-year colleges served 9,100 adults in full-time and part-time nondegree occupational programs, a significant decline of about 25 percent. Enrollment losses are equally attributable to declining enrollments in full and part-time programs.

Among full-time enrollees the overall distribution remained generally unchanged as most program areas shared the enrollment drop. However, trade, industrial, and service education, though continuing to enroll the greatest number of adults experienced a disproportionately large share of the decline; whereas, business and office education experienced a modest enrollment increase. The largest single program continued to be drafting; whereas, automotive services exhibited the most precipitous enrollment decline.

Changing enrollment patterns among part-time enrollees strongly resembled those found among full-time enrollees. Abrupt declines in technical and trade, industrial, and service education were accompanied by enrollment gains in business and office education. Enrollment losses in architectural, electrical and other engineering related technologies accounted for the decline in technical education while sharp enrollment declines in electrical occupations, construction and maintenance trades, and air conditioning, refrigeration and heating caused enrollment in trade, industrial, and service education

to decline. Simultaneously, business and office education scored significant enrollment advances in data processing and supervisory and administrative management programs. The latter program contained the greatest number of part-time enrollees of any other program offered at public 2-year colleges.

EDUCATIONAL OPPORTUNITY CENTERS

Enrollment of adults in full-time and part-time occupational programs at educational opportunity centers reached 7,726 during the recently concluded academic year, a phenomenal growth rate of approximately 67 percent.

All program areas shared in the rapid growth of full-time enrollment with health occupations education accounting for a disproportionately large share of that growth due to the addition of a program in pretechnical curriculum which contained the vast majority of enrollments in the program area. The largest program area, business and office education, showed moderate growth in every program. The most popular program among full-time enrollees was stenographic, secretarial, and related occupations.

Enrollments in part-time adult occupational education programs almost tripled. This tremendous growth resulted in increased enrollment for every program area as well as the addition of two more program areas, technical and health occupations education. The greatest share of enrollment growth accrued to the largest program area, trade, industrial, and service education. Pretechnical curriculums in health; technical; and trade, industrial, and service education comprised a major share of the overall enrollment growth.

HUMAN RESOURCES

"The most valuable resource available to a nation is its population. Anything which hinders the population from being productive necessarily involves a waste of at least part of the human resource. Likewise, a failure to improve upon the quality of human resources represents a failure to utilize human resources to their fullest capability and, thus results in a loss to society.

Attempting to remove hindrances to active participation in productive activity and improving the quality of this participation are tasks which fit neatly into the domain of occupational education planners. Some of the more prevalent hindrances to labor market activity are those inspired by custom, tradition, fear, etc., which have led to discrimination against females and against particular social groups. Discrimination not only frustrates people's desires to enter the active labor force, but also runs counter to all economic notions of efficiency in resource allocation and all moral and ethical considerations of equity, freedom, and justice."[1]

[1]Kaufman, Jacob J., Sumansky, John M., "Manpower Planning, Occupational Education, and the Decision to Participate in the Labor Force," Technical Paper No. 2, 1974, p. 1 (Center for Occupational Education).

ENROLLMENT PATTERNS, BY SEX

Secondary occupational education enrollments were 57 percent female during the 1974-75 school year, a decrease of about 1 percent from the previous school year. The overall predominance of female enrollees at this level can be traced to their disproportionately large concentration in the largest secondary program area, business and office education. Approximately three-quarters of all enrollment in that particular program area was female; however, this marked a decline of nearly 3 percentage points from the previous academic year. Meanwhile, females also comprised more than three-quarters of the enrollment in health occupations and home economics education. Female concentration in both programs, however, declined by 1 percent from a year ago. Similar to past years, dental assisting programs contained the single greatest concentration of female enrollees.

Concurrently, males comprised more than three-quarters of the enrollment in technical; agriculture; and trade, industrial, and service education, respectively. Male concentration in both technical and agriculture education increased by about 5 percent during the 1974-75 school year; whereas, male concentration in trade, industrial, and service education declined by about 1 percent. Aviation operations programs replaced electrical occupations programs as the single most male concentrated occupational program. Enrollment in distributive education was evenly divided between the sexes.

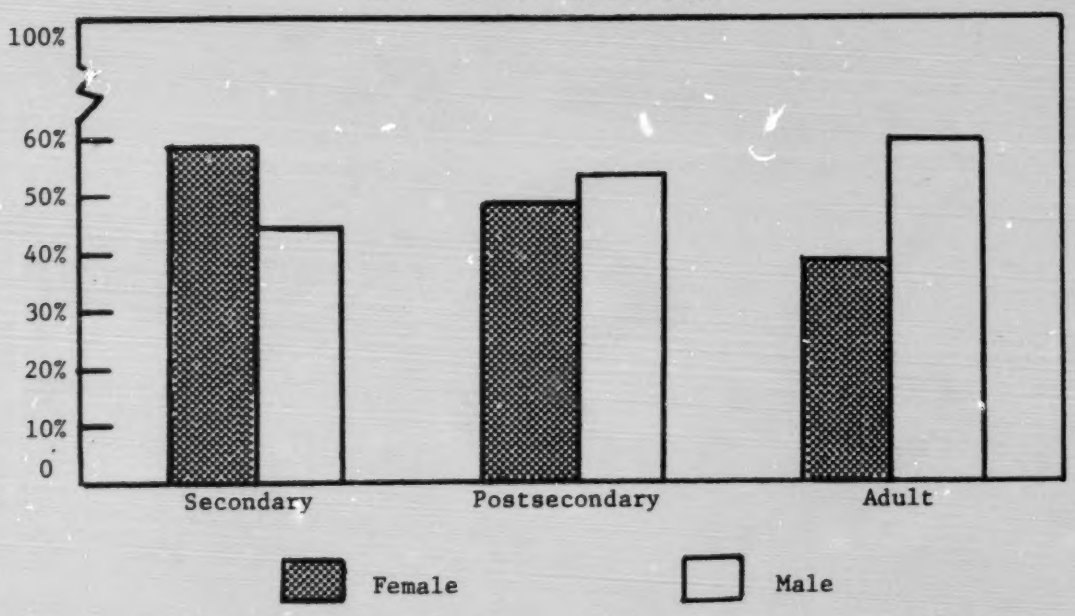
The secondary enrollment distributions among the various program areas according to sex, by each major agency type were generally parallel. However, there were two instances where the distribution of a particular major agency type significantly differed from the overall distribution of enrollment. One was agriculture education enrollees served by the major cities while the other was distributive education enrollees served by BOCES. In both instances female concentration substantially exceeded the norm. Otherwise, differences in enrollment, by sex, among the major secondary agency types generally reflect differences in the mix of programs offered by a particular agency type. For example, the highest degree of male concentration was found among BOCES enrollment and the overall mix of programs at BOCES was most concentrated in trade, industrial, and service education, which has predominantly attracted male enrollees. Similarly, the highest degree of female concentration was found among local public school enrollment and the overall mix of programs at local public schools was most concentrated in business and office education, which has predominantly attracted female enrollees at the secondary level.

Postsecondary occupational programs served a narrow majority of males in full-time degree programs while part-time degree enrollment was evenly divided between the sexes during the 1974-75 academic year.

The enrollment distribution, by sex, among the various program areas is somewhat unique at the postsecondary level. For instance, enrollment in business and office education is evenly divided between the sexes. In addition, enrollment in trade, industrial, and service education is not nearly as male concentrated as it is at the secondary level due to substantial numbers

of female enrollees in such programs as social service and educational paraprofessional. Shifting enrollment patterns among the sexes can be found in almost every program area. For instance, full-time female enrollment constituted 37 percent of total full-time degree enrollment in agriculture education, an increase of about 4 percent or more than twice the female concentration found in secondary agriculture education. Except for health occupations education, female enrollment in every remaining program area constituted an additional 1 percent of total enrollment during 1974-75. The exception, health occupations education, is typically female concentrated yet males gained an additional 1 percent of overall enrollment. Home economics education was the only program area among full-time enrollees to be more concentrated in the predominant sex this year than last.

OCCUPATIONAL EDUCATION ENROLLMENT BY SEX
AND LEVEL OF INSTRUCTION



The distribution of part-time enrollees, by sex, among the various program areas generally resembled the distribution of full-time enrollees but was more volatile in its year-to-year changes. For example, male concentration in agriculture education jumped 12 percent to join home economics education as the only two program areas among part-time degree enrollees to be more concentrated in the predominant sex this year than last. Meanwhile, increased diffusion of the sexes characterized the enrollment distributions of the remaining program areas. The foremost example being trade, industrial, and service education which showed a gain of approximately 15 percent in the female share of total enrollment, mostly due to substantial female participation in educational paraprofessional and law enforcement training programs.

Male concentration in adult occupational programs operated by public secondary educational agencies decreased to 58 percent during the 1974-75 academic year. This represents a significant increase of about 5 percent in the female share of total enrollment. Moreover, there exists a substantial amount of variance from this overall average in each of the three subcomponents of adult occupational education at the secondary agencies.

Instruction offered as adult preparatory is based upon the assumption that adults are seeking to prepare themselves for employment in a new field. This category of adult occupational education served a narrow but widening majority of females during the past school year. Every program area except technical and trade, industrial, and service education contained a majority of female participants.

Adults enrolled in supplementary occupational programs presumably have jobs already and are seeking improved competence and/or advancement in their fields. This is the largest category of adult occupational instruction at the secondary agencies and is comprised of a substantial and widening majority of male enrollees. Approximately 2 of every 3 persons enrolled in adult supplementary programs are male.

The final category of adult occupational programs at secondary agencies, apprenticeship training, includes adults who are learning the skills of a particular occupation under the guidance of accomplished workers already working in that occupation. Enrollment in apprentice programs is overwhelmingly male concentrated. However, females comprised 5 percent of total apprentice enrollment, an increase of about 4 percent from the previous year. Much of the increase among female apprentices can be traced to the increase of apprentices in business and office education.

Approximately 2 of every 3 persons enrolled in full-time adult occupational programs at community colleges and 2-year agricultural and technical colleges were male. Male enrollments were concentrated in technical and trade, industrial, and service education; whereas, females were predominant in every other program area except agriculture education.

Nearly 3 of every 4 persons enrolled in part-time adult occupational programs at public postsecondary institutions were male. Males were predominant in every program area except health occupations and home economics education. Nonetheless, females comprised an additional 3 percent of overall part-time nondegree enrollment during the past academic year.

Educational opportunity centers also offered full and part-time nondegree adult occupational programs. Among full-time enrollees, females comprised nearly 3 out of 4 adults participating in occupational programs. Surprisingly, females were predominant among technical education enrollees while males comprised the majority of enrollment in home economics education.

Females also comprised nearly 3 of every 4 adults enrolled in part-time occupational programs at educational opportunity centers. Females again outnumbered males among part-time technical education enrollees. Males comprised the majority of enrollees in distributive and trade, industrial, and service education only.

MINORITY GROUPS

During the 1974-75 academic year, a grand total of 144,601 minority group members (blacks, Spanish-surnamed Americans, American Indians, and Orientals) were served in secondary, postsecondary, and adult occupational education programs, comprising approximately 22 percent of overall public occupational education enrollment in New York State.

The greatest number of minority group members, nearly 100,000 students, were enrolled in public secondary occupational programs. The representation of every minority group in public secondary occcupational education exceeded its corresponding representation in total public secondary education for the first time ever. For example, blacks comprised 15.1 percent of public secondary occupational enrollment but only 14.8 percent of total public secondary enrollment. Similarly, Spanish-surnamed Americans constituted 8.5 percent of secondary occupational enrollment but only 8.0 percent of the total public secondary school enrollment. Likewise, American Indians and Orientals combined to account for 2.0 percent of secondary occupational enrollment, far above their 0.9 percent representation in total public secondary education. Overall, minority group members accounted for 25.6 percent of secondary occupational enrollment but only 23.7 percent of total public secondary enrollment.

Most of the increased participation in secondary occupational education among the various minority groups can be found in the five major cities of the State, especially New York City. Almost 86 percent of all minority group members enrolled in secondary occupational programs were concentrated in the major cities. Moreover, minority group members comprise nearly 56 percent of the entire secondary occupational enrollment in the major cities. The enrollment distribution of minority group members among the various program areas ranged from a low of 12 percent of total enrollment in agriculture education up to a high of almost 37 percent in health occupations education.

Public 2-year colleges served 2,661 minority group members in full-time degree occupational programs while another 476 minority group enrollees were enrolled in part-time degree occupational programs. However, these numbers constituted a very small percentage of total enrollment in public postsecondary occupational programs and were far below the overall representation of minority group members among total postsecondary enrollment at public 2-year colleges.

Adult occupational programs served 42,334 minority group members, about one-third of the total adult occupational enrollment. Adult occupational programs offered by secondary agencies in New York City accounted for almost three-quarters of all minorities enrolled in adult occupational programs. The most significant change among adult occupational programs occurred in apprentice

programs where minorities comprised 47 percent of all persons receiving apprenticeship training. This was a dramatic advance from a year ago when minorities accounted for only 9 percent of apprentice enrollment.

PERCENT OF OCCUPATIONAL EDUCATION
ENROLLEES WHO WERE MEMBERS OF MINORITY GROUPS
BY LEVEL OF INSTRUCTION

Racial/Ethnic Origin	LEVEL OF INSTRUCTION		
	Secondary	Postsecondary	Adult
Black	15.1	1.5	24.2
Spanish-surnamed American	8.5	0.5	6.6
American Indian	0.8	*	0.4
Oriental	1.2	0.2	0.4
TOTAL--All Minority Groups	25.6	2.2	31.6

*Less than 0.1 percent.

SPECIAL NEEDS STUDENTS

During the 1974-75 academic year, 149,238 disadvantaged and 17,421 handicapped persons were served in public occupational education programs. These students required either special programs or supplementary services in order to succeed in an occupational program offering and comprised a little more than one-fourth of total public occupational education enrollment.

Enrollment of disadvantaged and especially handicapped persons accelerated rapidly at the secondary level. While overall secondary occupational enrollment remained steady, disadvantaged enrollment grew by nearly 6 percent to a level of 97,494, and handicapped enrollment almost doubled its previous year's level, increasing to 15,916 students.

Enrollment growth among special needs students was concentrated in the New York City public secondary schools. Nearly 85 percent of all disadvantaged and 70 percent of all handicapped enrollees at the secondary level received their instruction in the New York City public schools. Outside the major cities, local public schools served more than three-quarters of the remaining disadvantaged enrollees; whereas, BOCES served a majority of the remaining handicapped enrollees.

Public occupational education served nearly 50,000 disadvantaged adults as well as more than 1,000 handicapped adults during the recently concluded school year. About 38 percent of total adult enrollment in public occupational education was disadvantaged. Educational opportunity centers served more than 7,000 disadvantaged adults but about 85 percent of all disadvantaged adult enrollees received their instruction at secondary agencies, with 90 percent of these adults concentrated in New York City public schools. Handicapped adult enrollees were more widely dispersed. For instance, more than one-third of all handicapped adult enrollees received their training at various BOCES across the State. New York City public schools accounted for less than half of all handicapped adult enrollees in the State.

Current data on the number of disadvantaged and handicapped students enrolled in full and part-time associate degree occupational education programs at 2-year public colleges are incomplete, because colleges of the City University of New York did not provide any information.

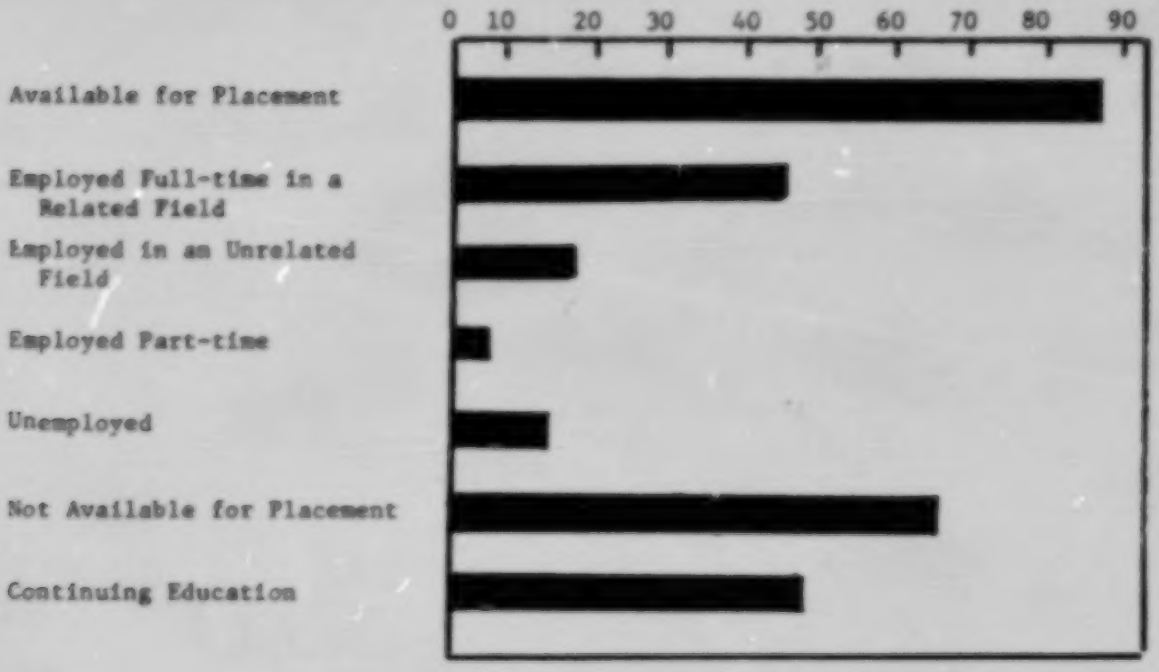
FOLLOWUP INFORMATION

One of the most common measures of success of occupational education is the ability of its graduates to secure and hold jobs in the occupational field for which they are trained. Currently, the Reporting and Evaluation System for Occupational Education (RESOE) requires followup surveys of those students who complete occupational programs at each of the various levels of instruction in order to determine, among other things, whether individuals have been employed in occupations for which they were trained. During fiscal year 1975, data pertinent to the employment status of students who completed occupational education programs in the 1973-74 school year were collected and summarized. Whenever graduates of public occupational education programs could not be located or neglected to supply followup information, inferential statistical techniques were employed which were designed to assign the most appropriate status to each particular graduate.

By the conclusion of the 1973-74 school year, approximately 152,500 individuals had completed secondary, postsecondary, and adult preparatory occupational programs in public educational institutions across the State. These graduates comprised the potential supply of trained labor force entrants emanating from public occupational education during fiscal year 1975. However, for various reasons more than 64,000 graduates elected not to immediately participate in the labor force. Nearly 3 of every 4 nonparticipants chose not to participate in order to continue their education and will presumably enter the labor force at a later time. Meanwhile, 87,733 graduates indicated that they were available for placement. Of this actual supply, 48,292 graduates secured full-time employment in fields related to their occupational training, a training related placement rate of approximately 55 percent. An additional 18,312 graduates accepted employment unrelated to their field of training while 6,850 others worked only part-time. The remaining 14,279 graduates were actively seeking employment but were unable to find a job as of the time of this survey, an unemployment rate of about 16 percent. The recession in the

New York State economy which began early in 1974 appeared to be the major contributing factor to the higher level of unemployment among labor force entrants emanating from public occupational education during fiscal year 1975.

SUMMARY OF 1973-74 OCCUPATIONAL EDUCATION COMPLETION DATA (In Thousands)


0 10 20 30 40 50 60 70 80 90
Available for Placement
Employed Full-time in a Related Field
Employed in an Unrelated Field
Employed Part-time
Unemployed
Not Available for Placement
Continuing Education

SECONDARY

Secondary occupational education programs were completed by 90,639 students during the 1973-74 school year, approximately the same number as a year earlier. Of this total, almost half indicated they were unavailable for placement, with about 72 percent of these students electing to continue their education. Meanwhile, 45,685 graduates chose to immediately enter the labor force. Approximately half of these jobseekers secured full-time employment in related occupational fields. Altogether, nearly 80 percent of all secondary occupational education graduates participating in the labor force obtained employment while the remaining 20 percent were still unemployed when surveyed during the fall of 1974.

POSTSECONDARY

Community colleges and 2-year agricultural and technical colleges had 20,084 postsecondary students complete occupational programs during 1973-74. More than 98 percent of these completions were in full-time degree programs. Followup information is collected on full-time enrollees only. The labor force participation rate among graduates of full-time degree occupational programs was nearly 75 percent, much higher than at the secondary level. Generally, graduates of occupational programs at the postsecondary level of instruction had the most favorable employment experiences. Nearly 80 percent of all associate degree recipients in occupational education secured full-time employment in a related field. Another 11 percent accepted employment outside of their training or on a part-time basis. Unemployment edged upwards from the previous year to 9.8 percent but was still lowest among all levels of occupational education.

PERCENT OF PERSONS AVAILABLE FOR PLACEMENT
EMPLOYED FULL-TIME IN A RELATED FIELD
BY PROGRAM AREA AND LEVEL OF STUDY

Program Area	Secondary	Postsecondary	Adult
Agriculture Education	59	72	40
Distributive Education	52	85	59
Health Occupations Education	68	86	54
Home Economics (Gainful)	42	63	22
Business & Office Education	47	74	51
Technical Education	39	82	69
Trade, Industrial, and Service Education	48	75	54

ADULT

Followup information at the adult level is collected for adults enrolled in preparatory programs only. This includes all persons enrolled in adult preparatory programs at secondary agencies as well as full-time nondegree enrollees at public 2-year colleges and educational opportunity centers. The assumption is that these adults are preparing themselves for employment in a new field, whereas, those adults enrolled in supplementary programs presumably have jobs already and are seeking improved competence and/or advancement in their present fields. There were 41,745 adults completing preparatory programs

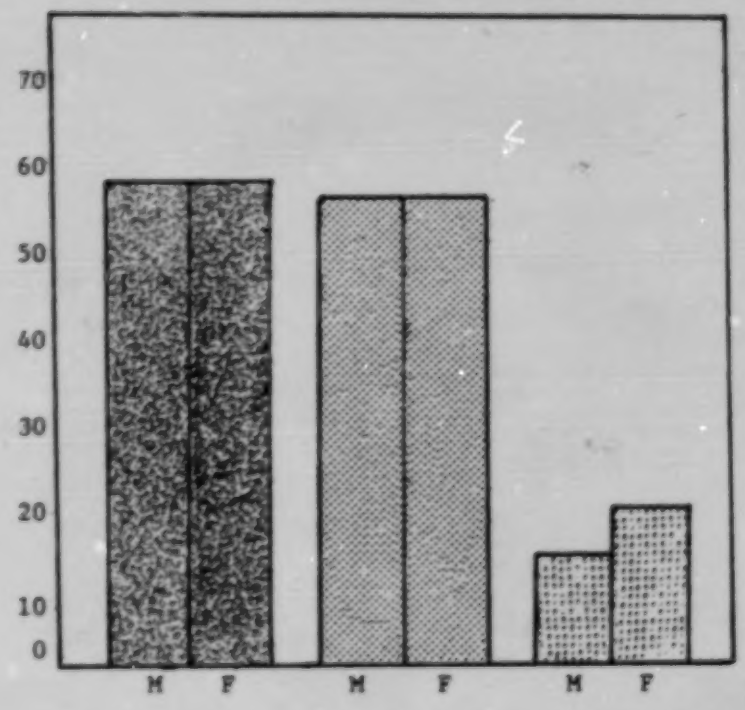
during the 1973-74 school year, almost twice the previous year's number of completions. Nearly 2 of every 3 adult graduates entered the labor force after completing their educational or training experience while the vast majority of the remainder elected to continue their education. About 53 percent of these labor force reentrants secured full-time employment in the new occupational field for which they were trained. Altogether, 87 percent of all graduates of preparatory occupational programs who participated in the labor force after graduation obtained employment. The rate of unemployment among adults was 13 percent.

LABOR MARKET STATUS AMONG MALES/FEMALES

Females comprised approximately 60 percent of total secondary completions. The labor force participation rate among females was 51 percent, compared to about 49 percent for males. Female labor force entrants displayed a greater likelihood of being employed full-time in a related field despite also having a greater likelihood of being unemployed. The latter can be attributed to male entrants accepting full-time employment in an unrelated field more frequently than females.

Slightly more than half of all full-time enrollees receiving associate degrees in occupational education were female. Female degree recipients were again more likely than males to enter the labor force. Both sexes achieved training related placement rates of about 80 percent but males were more likely than females to obtain employment in an unrelated field. This was reflected in higher unemployment among female entrants than their male counterparts.

COMPARISON OF WORK RELATED STATUS BY SEX, ALL LEVELS COMBINED



Males completing adult preparatory programs at secondary agencies outnumbered females by a ratio of nearly 2 to 1. Labor force participation among females was 66 percent however, about 2 percent above the male rate. Nevertheless, training related placement among males was 55 percent, compared to only 44 percent among females. Again, males obtained full-time employment in an unrelated field more frequently than females. This was reflected by a 20 percent unemployment rate among females, about 2 1/2 times that of their male counterparts.

A little more than half of all full-time enrollees completing nondegree occupational programs at public 2-year colleges were male. Males and females were equally likely to enter the labor force and to obtain full-time employment in a related field. For once, females accepted jobs unrelated to their field of trainimg more often than males. The result was a female unemployment rate only half that of their male counterparts.

About 4 of every 5 adults completing full-time nondegree occupational offerings at educational opportunity centers were female. Equally high percentages of both males and females entered the labor force and obtained full-time employment in a related field. Females were, however, a little more likely than males to be unemployed.

LABOR MARKET STATUS AMONG MINORITY GROUPS

Minority group members comprised about 19 percent of total secondary completions during the 1973-74 school year, almost four times the size of the previous year's share. Blacks constituted nearly two-thirds and females about the same, of all minority group members who completed secondary occupational programs. About half of all minority group members who completed secondary occupational programs elected to continue their education while a little less than half of both sexes chose to participate in the labor force. Only 43 percent of female and 34 percent of male entrants in the labor force could obtain full-time employment in a related field. Moreover, nearly 35 percent of both sexes were unemployed.

Minority group members constituted only 3 percent of full-time enrollees who completed degree programs at public 2-year colleges. Females comprised 57 percent of all minority group members completing postsecondary occupational programs. About 80 percent of females and 72 percent of males participated in the labor force after graduation. Approximately 80 percent of both male and female labor force entrants obtained full-time employment in a related field. Unemployment rates among male and female minorities were 7 and 10 percent, respectively.

Minority group members accounted for 23 percent of total completions of adult preparatory programs at secondary agencies while blacks constituted two-thirds of that percentage. About 63 percent of all minority group members completing preparatory occupational programs at secondary agencies were male. Nearly 40 percent of these male graduates entered the labor force compared to 44 percent of the female graduates. Nonetheless, the training related placement

rate among males was 60 percent, about 24 percent above that of their female counterparts. Moreover, unemployment among males measured 11 percent while females experienced 27 percent unemployment.

Almost two-thirds of full-time enrollees who completed nondegree occupational programs at educational opportunity centers were members of minority groups. Female graduates outnumbered males by a ratio of 3 to 1. Both sexes had a 70 percent labor force participation rate and a 65 percent training related placement rate. Unemployment was high among both males and females, 23 and 26 percent, respectively. Full-time nondegree completions at public 2-year colleges included extremely few minority group members.

LABOR MARKET STATUS AMONG SPECIAL NEEDS STUDENTS

Nearly 20 percent of total secondary completions was comprised of students with special needs, the disadvantaged and handicapped. Approximately 49 percent of these students participated in the labor force after graduation. About 39 percent of these labor force entrants secured full-time employment in a related field. Another 26 percent accepted employment in an unrelated field or on a part-time basis while the remaining 35 percent was unemployed. Of those not entering the labor force at this time, nearly 88 percent are continuing their education.

Less than 2 percent of full-time enrollees completing degree programs at public 2-year colleges were persons with special needs. More than three-quarters of those special needs students completing associate degree programs entered the labor force. Approximately 83 percent of these labor force entrants obtained full-time employment in a related field, while 9 percent were unemployed.

Adults with special needs accounted for more than 27 percent of all adults who completed preparatory occupational programs. These adults had a labor force participation rate of 52 percent, a training related placement rate of 52 percent, and an unemployment rate of nearly 21 percent.

SUMMARY OF ENROLLMENTS IN OCCUPATIONAL EDUCATION
(1975)

	Secondary	Post-Secondary	Adult
Agriculture	10,122	3,682	1,622
Distributive Education	21,088	10,343	2,676
Health Occupations Education	12,126	27,921	7,600
Home Economics (gainful)	8,751	3,355	1,586
Business and Office	221,024	50,946	43,500
Technical Education	9,437	20,444	2,710
Trade, Industrial, and Service	104,324	22,164	71,454
Total	386,872	138,855	131,148
Consumer and Homemaking 7-12	247,884	-----	92,306

DISTRIBUTION OF ENROLLMENTS BY ETHNIC CATEGORY,
POPULATION GROUP, TYPE OF PROGRAM, AND LOCATION

	Secondary	Post-Secondary	Adult
Black	58,575	2,403	31,700
Spanish-Surnamed American	32,882	765	9,674
American Indian	3,008	95	492
Oriental	4,665	350	468
Other	287,742	135,242	88,814
Cooperative	27,966	6,812	--
Regular	358,906	132,043	131,148
Apprentice	--	--	16,472
General	273,462	135,902	80,852
Disadvantaged	97,494	2,464	49,280
Handicapped	15,916	489	1,016
BOCES	51,004	--	38,556
Major 5 Cities	153,446	--	56,384
LEA	182,422	--	19,382
Public 2-year college	--	138,855	9,100
Educational Opportunity Center	--	--	7,726

Program Developments and Accomplishments

ELEMENTARY AND EARLY SECONDARY

- Goal: Enable students in all grades to develop awareness and understanding of the nature of work and the wide variety of occupational needs and opportunity in our society, and to explore and develop their own needs, interests, and abilities in relation to present and future roles as students, workers, and members of society.

Accomplishment

During 1974-75, nearly 250,000 students in grades 7-8 and over 150,000 students in grades 9-10 were served in traditional prevocational programs in the areas of industrial arts, home economics, business, and agriculture. However, as described below, major emphasis during the fiscal year was on developing a more comprehensive, interdisciplinary approach to occupational orientation and exploration for students at all educational levels, with particular emphasis on the elementary and early secondary grades, through funding of career education models.

Description

During the last 4 years the concept of career education has been introduced, implemented, and expanded in the schools of New York State. Preliminary groundwork was laid in 1971, when the Regents position paper on occupational education was issued. After a year's study, the decision was made to support career education projects uniquely developed to respond to local needs, rather than impose a State model. Proposals were to be submitted each year, but funding was projected for a 3-year period. In the first year 22 proposals were funded, but because of staff changes and other school priorities, three of the projects were dropped. In addition, career education programs in the cities of Syracuse and Yonkers, and the SPICE (State Project to Implement Career Education) program in New York City were funded separately.

Over the past 3 years, a network of project monitors was established. Drawn from the occupational education instructional staff, the monitors functioned in a liaison/advisory capacity, and visited projects monthly.

In each funded project money was budgeted for an outside evaluator. In five cases, the Cornell Institute for Research and Development contracted to perform the evaluation. The other projects either contracted with individual evaluators or were able to use the services of the staff evaluators employed by the BOCES. These evaluators worked

closely with the coordinators, particularly in clarifying and/or restructuring goals, identifying testing materials, conducting onsite evaluations, and preparing a final evaluation report. At the State level, the Bureau of Occupational Education Research provided guidelines for monthly reports by the coordinators, gathered overall statistical data from the projects, made a minimum of one site visit to each project, provided research assistance as requested, and prepared interim reports for the coordinators and monitors.

Project coordinators, administrators, and State Education Department personnel have met biannually for a 2-day session. As the projects have developed, the need for articulation and support from areas other than occupational education has been felt and sought. Education Department personnel in administration, guidance, curriculum, minority affairs, nonpublic schools, and postsecondary education have participated in these meetings.

Project coordinators had these primary goals: establishing realistic objectives for the time period and budget given; determining the most effective activities to meet the individual project's objectives relating to curriculum development, staff training, community involvement, guidance, and student participation; providing current and efficient supervision, consultant service, and resource materials; obtaining periodic progress reports and determining effective use of the data; establishing an effective evaluation procedure. Common activities among the project coordinators include: generating career education information and disseminating it to the public, decision-makers, educators, and students, through TV, radio, the press, newsletters, organizational meetings, and district and building meetings; conducting workshops to clarify and promote understanding of the mechanics of writing career education curriculum modules and infusing them into ongoing curriculums; establishing resource centers; surveying, listing, and utilizing community resources, including industry, parents, and organizations; establishing inservice and college credit courses; utilizing the Boy Scout Explorer activity in career education; utilizing advisory boards and task force committees; working more closely with guidance counselors; soliciting assistance from SED instructional units other than occupational education units; revising curriculum materials; writing newsletters; depending on third party evaluators for formative evaluation and implementing their advice; working and sharing ideas with other project coordinators; evaluating more critically commercial materials available in career education; seeking additional funding sources.

During 1974-75, a total of 235 school districts were involved in VEA funded career education activities, an increase of 17 percent over 1973-74. Excluding New York City, Yonkers, and Syracuse, approximately 115,000 students in grades K-12 were affected. Nearly 4,000 teachers, guidance counselors, librarians, and other educational staff were involved in workshops related to career education.

The following are brief descriptions of the 19 regional career education models, followed by descriptions of the specially funded models in New York City, Yonkers, and Syracuse.

Broome, Tioga BOCES

An inventory of career education materials shows that there have been substantial additions to the curriculums of the component school districts. The teacher-made career education materials service both regular classes and special education groups. The procurement of an ESEA library media grant will add a substantial amount of career education material to the BOCES library, benefitting all of the component school districts. The establishment of a data bank and referral center provides a centralized resource that can be drawn upon by any component school. Two manuals were developed in conjunction with the data bank: The Community Resources Inventory, a directory of all community resources sent to approximately 2,000 business and community leaders; and a How to Use booklet which instructs teachers in how to utilize the data bank. Approximately 3,500 of these booklets were distributed. The questionnaires, surveys, and inventories that have been administered to faculty, students, and administration show that career education is making significant headway. There appears to be a solid core of teachers and administrators who support career education. Elementary school children who were exposed to career education scored significantly higher than their control counterpart on the Career Awareness Inventory.

Cortland, Madison BOCES

By the end of the third year, the evaluation indicates that a solid foundation has been established for the ongoing infusion of career education concepts. All schools in the Tri-BOCES area (Cayuga; Cortland, Madison; Tompkins, Seneca, Tioga) have been involved in the planning and/or developmental process of the career education program. Curriculum materials have been written to help teachers infuse the concept of career education in their teaching process. These modules are being used by instructors in area schools for the purpose of orientation and evaluation. A total of 69 modules have been written, in humanities, guidance, physical education, mathematics, science, social studies, industrial arts, art, business education, home economics, English, foreign language.

Delaware, Chenango BOCES

The following are representative of accomplishments in this project: 225 area teachers have worked in K-12 career education curriculum development and have developed instructional materials in career education and how to infuse it into existing curricula; 100 area teachers have completed at least 3 graduate hours of instruction in career education; 80 percent of the guidance counselors in the area have completed

18 hours of inservice training in career education and career guidance; informational sessions on career education have been held for 14 local boards of education and 15 community groups across the region; 1,200 copies of the monthly Career Education Project newsletter have been distributed to all teachers, administrators, board members and community groups in the region; leadership task forces on career education have been established and are functioning in seven districts; six local school districts have district plans in career education, adopted by their Boards of Education, which include (a) K-12 learner goals and objectives in career education, (b) an endorsement of career education as a priority of the curriculum, (c) Board of Education endorsement/approval of career education, and (d) establishment and operation of a Career Education Instructional Resource Center which includes 400 instructional program and curricular units, sixty 16mm films, 60 sound filmstrips, 15 kits and games, a complete career information system.

Dutchess BOCES

The major thrust of the project was orientation for teachers, counselors, administrators, and parents. Seventeen teachers participated in a Bread & Butterflies workshop. Ten of the teachers planned to use the series. Thirty teachers, including representation from SUNY of New Paltz, participated in a values clarifications workshop. A career education presentation was made to 62 parents who found the meeting informative but did not feel it affected their aspirations for their childrens' career goals. The media center processed 639 requests for career education (K-12). An estimated 37,000 students viewed the film and filmstrips. The Mid-Hudson Career Development Center also maintained a small nucleus of books and curriculum guides which were widely circulated among the schools. The Colgate Information Test (CIT) was administered to grade 8 students at the Arlington Junior High School. This test measured three cognitive aspects involved in the vocational decisionmaking process: 1) understanding of self; 2) understanding opportunities; and 3) understanding the decision-making process. The T-test was used in analyzing the results. Significant gains were made as indicated by the scores on the post-test. Thus, it can be assumed that the infused career curriculum had a positive impact on students' learning.

Erie BOCES #1

The major thrust of the project was the development, field testing, and revision of Career Education Instructional System packets. Twenty school districts were involved, including about 100 schools, 300 classes K-12 and 5,197 students. The learning activity packets are developed in language arts, mathematics, social studies and science in each grade level, K-12. In addition, two other VEA funded career projects used the packets. The evaluators of this project concluded that responses to the Career Education Project Management questionnaire

indicated general satisfaction with the project management and a supportive atmosphere at the local level among fellow staff members and parents. The major element of evaluation of the CEIS learning activity packet was the pre-post achievement tests. Analysis of the data indicated positive effects on achievement. In addition, questionnaires were sent to 222 field test teachers in 21 schools, including field test schools outside the Erie project who were using CEIS packets. The teachers reported a total of 8,196 students were affected by the CEIS materials used by the teachers reporting. The learning activity packets helped teachers to develop alternative ways of presenting materials to students. Administrators in 54 schools responded to a questionnaire similar to the teacher questionnaire. Their responses reflected their support. Eighty-five percent felt that the concept of expanding the classroom into the community is viable. Eighty-one percent recommend the continued development of the learning activity packets. The administrators also indicated that information from teachers regarding career education materials had been positive. The CEIS staff, through the cooperation of the field test teachers, interviewed 334 students in experimental classes. The attitudes of the students were positive. Girls were slightly more positive than boys. The first task in the improvement of the learning activity packets is a second revision of the materials, based on the learning activity evaluation forms submitted by the field test teachers. A team of field test teachers will be invited to carry out the revision. Another facet of the revision will be the elimination of bias from the learning activities. The CEIS Bulletin, distributed to all participating schools and to a selected State and National group, lists the availability of resource materials, idea exchange, workshop activities for the project, and results of project surveys.

Greene #2, Delaware, Schoharie, Otsego BOCES

The central element in this project is the Curriculum Guide. This is a compilation of printed curriculum materials which served as a resource for teachers in participating schools. These materials were compiled from teacher-made career education lessons, and programs developed in other State and regional projects. They are included in a set of five notebooks. Each school was given a set of these notebooks and individual instruction on their use. The purpose was to have them individualized for each school by additions and revisions which resulted from teachers' use. Goals were achieved as follows: the orientation of 750 teachers to the practical concepts of career education; the establishment of goals, activities and resource materials for teachers and guidance counselors; the inservice training of career education teams and 214 teachers and the development of programs in 18 of 21 central school districts; the creation of community advisory groups and files of community and school resources; the first-stage development of curriculum guides for K-12 infusion programs and techniques for career education emphasis in the classroom; the writing of original curriculum materials; the devising of instruments to measure progress

in career education. To help administrators in planning for next year, the coordinator prepared and sent a list of "Final Suggestions for Continuing Local Career Education Program." Included with it was a listing of the names of those teachers and counselors who have been trained in workshops and/or have participated in the local infusion program. The project newsletter, Career Education News, was a collection of project activities in pictures and narratives written by teachers, which helped to solidify their identity with the project. Two inservice workshops were held for art teachers and science teachers and were evaluated "outstanding" by the participants.

Jefferson BOCES

Approximately 1,900 teachers have participated in 1-day workshops, faculty meetings, mini-course programs, EPDA workshops, materials evaluation workshops, inservice education programs, and graduate credit programs at local universities. In addition to classroom participation, public school students have participated in "Career Day" programs, exploratory work programs, work-study programs, career seminars, and college and university sponsored career orientation programs. The process of implementing the program included three phases. During the first phase an administrative organization was set up identifying potential organizations which could contribute to the development of career education in the region. Objectives were to identify individuals who could function as career education resource coordinators in area schools, and to train a corps of teachers in the concepts of career education. Concentration during the second phase was on presentations at administrators' meetings, faculty meetings, administrative cabinet meetings, mini-workshops, inservice educational programs, regional conferences, ETV programming, radio talk shows, newspaper articles and newsletters, and encouragement of teachers to attend statewide conferences, workshops, and graduate programs. The third phase concentrated on the dissemination of previously developed materials, locally developed materials, and a K-12 career education continuum tailored to individual school district needs.

Livingston County BOCES

Revised modules have been distributed to participating schools throughout the year. The final package of a 600 page machine shop curriculum has been distributed to those individuals directly concerned. The career education center plans, organizes, and implements the machine shop sessions held throughout the year. The center has supervised a pilot curriculum project geared to relating core subjects to occupational school students. Geneseo teachers have acted as consultants in developing this course, which combines English and social studies. An audio-visual display board has been designed and developed for elementary classroom use in all districts. This "Careers on Tour" display is intended to increase awareness of career opportunities. Also, a total of 27 separate commercial A/V items were previewed by teachers throughout BOCES for evaluation. Evaluations are compiled and distributed

throughout the schools in the BOCES district. All guidance counselors in the four counties served by the center received monthly packages of career related materials for display in their career information centers. A valuing and decisionmaking model was developed, and interested teachers were identified for a 1-day workshop. Twelve teachers were enrolled in a career education inservice course at Wayland Central during the fall semester. Teachers identified as having developed good instructional strategies for career education were utilized throughout the course sessions. Teacher evaluations indicated an excellent reaction to this course. Twenty-four elementary teachers were enrolled in a graduate, credit granting course offered by SUC Brockport. The Career Education Center worked very closely with the professionals to insure a fruitful program. Final evaluations indicated a very successful program. A Livingston BOCES teachers liaison advisory group was organized. Twenty-eight teachers representing 11 districts, the occupational school and the BOCES district special education center were identified. These teachers perform key roles as catalysts in promoting and coordinating career education activities within their districts. This committee met as a group several times during the year. Two local districts are currently developing a community resource listing, a cooperative venture sponsored by each local P.T.A.

Mamaroneck

Approximately 100 teachers were trained through workshops and through inservice training on how to develop learning activity packets that can be infused into classrooms K-12. Commercially produced materials were introduced into 50 classrooms for piloting. Community Resource Centers were established in each library throughout the five districts and volunteer parents began accumulating resource files that identified appropriate available speakers and field trip possibilities. Fifty-two teacher written LAP's were produced. Specifically, an effort was made to develop levels of career awareness in the elementary schools by exposing students to speakers, field trips, and mini-projects that tie basic skill learning to increased career knowledge. In the middle school, the focus was career exploration through library and class research, work experience, and learning the skills of decisionmaking. With the cooperation of the guidance department, a series of lunchtime workshops with guest speakers provided all high school students with basic knowledge on: the labor market--how to read labor statistics, job trends for the future, community college career programs, unions, civil service, the military, tools for job-hunting--resumes, interviews, references, applications. A selected group of students, with the cooperation of the English Department, participated in an intensive career exploration and job preparation project.

Nassau BOCES

The accomplishments of the project include: development of Career Resource Centers at Freeport and Westbury, serving as demonstration models; development of a Guidebook for use in grades 4-6, including 31 activities related to infusing elements of career education; enrollment of staff members from 36 districts of the county in career education inservice courses conducted by the project staff. The ten pilot school districts reported these activities: teachers piloting career education materials developed by teams of teachers, counselors, and administrators from each district; Superintendent's Day meetings focusing on career education for the entire faculty; counselors arranging and conducting Career Exploration Day programs at hospitals, department stores, etc.; faculty members making presentations to parent groups; career education concepts and activities being considered by district curriculum committees; the use and revision of local district teacher-developed films, filmstrips, and slide/cassette presentations; liaison with citizens' advisory committees.

Oneida, Hamilton, Herkimer BOCES #2

Thirty area teachers completed the course, "Using Community Resources in Career Education," developed a unit of infusion, and utilized methods of career education as a result. Twenty-five teachers were trained to conduct inservice workshops and compiled a handbook for conducting career education workshops. Twenty-four contact persons were identified. Workshops were held in 10 locations. A guidance counselors' workshop had 19 school systems represented by 33 counselors. An art teachers' workshop had 11 school systems represented by 15 teachers. New units of infusion were developed. A revised newsletter was issued to 250 area educators eight times during the project year. Community resource personnel were utilized by 21 school systems and 25 systems have business and industry involved in their career education effort. The Business Advisory Committee met twice during the project year. A survey of administrators concerning the projected status of career education revealed: 61 administrators stated that career education will be infused into their curriculum next year; 40 administrators perceived the counselors as being directly involved in career education; 25 stated business and/or industry were involved in the career education effort at their school; 64 administrators have career education materials available in their media centers; 21 have a plan for career education developed for next year; 14 have a budget for career education; seven administrators have a committee for implementation of career education next year.

Orleans, Niagara BOCES

Through this project over 2,000 educators have been provided with a basic explanation of career education and its components. During 1974-75 one school district employed a person with specific responsibility for the coordination of the career education program. During

1975-76 four school districts have appointed individuals to the position of career education coordinator. Superintendents' conferences in five school districts dealt with career education. These conferences examined such diverse topics as valuing, career education materials review, and career education planning activities. Two regional 4-day workshops were held to train interdisciplinary teams of teachers from 16 school systems in the infusion of career education into their curriculums. The first workshop in spring of 1973 was planned for grades 7-12 personnel. In addition to a curriculum infusion process, leadership was being developed within each team. Each team has developed a proposal that calls for career education activities that meet local needs. These range from a middle school planning team designing a career education model for its building; a senior high school interdisciplinary team designing curriculum; to the establishment of career information centers in the three school buildings of one particular district. All of the activities call for inservice education. Each team was encouraged to plan activities that would carry over into the '75-'76 school year. During 1974-75, local school districts began spending their own funds on career education materials in an effort to match mini-grant funds made available from the VEA grant. This is evidence that the concept of career education is gaining local acceptance. As a result of the mini-grant activities some districts will be compiling career education booklets for district-wide distribution. Prior to the distribution of these materials the participants will be provided inservice training on how to properly utilize the materials. Cross-building communication and coordination was improved in several districts by this mini-grant activity. Staff members from varying grade levels discussed common problems and solutions.

Putnam, Westchester BOCES

Two hundred staff members representing 25 LEA's were involved in developing career education materials and other activities. Project staff have attended planning meetings in a advisory capacity, the project has developed general planning documents for LEA's, and there were numerous requests for resources and materials. Working drafts of nine manuals were completed and one is in final form. These are: "A Handbook of Practices and Procedures for Career Education Programs;" "Career Education in the Elementary School: Career Awareness;" "Career Education in the Middle School/Junior High School: Career Exploration;" "Career Education in the High School: Infusion;" "Career Guidance and Placement in a Career Education Program;" "Community Resources for Westchester and Putnam Counties" (Completed). Staff from Brewster High School developed a Career Information Center. The Carmel staff developed a program handbook for the Carmel Middle School. Staff from Lakeland developed and pilot tested, in two sessions, a Career Education Unit for 11th grade students. The need for a specific guidance program was identified through discussions with several districts and a career guidance and placement program was developed. Many districts are planning to continue career education activities.

Rensselaer, Columbia BOCES

The evaluator noted these strengths. Direct involvement in project activities increased from 27 participants during the 1973-74 school year, to 81 participants for the 1974-75 school year. Participants took a more direct role in developing student evaluation materials. Teachers were much more successful in developing useful career materials than in previous years. Student acceptance of career activities was greatly improved over previous years. Effectiveness of inservice programs was greater than in previous years. Two activities sparked great interest among parents, elementary school students, and teachers: "Speak to an Author," a joint classroom library effort which involved interviewing an outstanding personality by phone; and "Shopping Time," a culmination of the study of the jobs associated with a shopping mall. Parent participation was outstanding.

Rockland BOCES

The achievement of the project activities include: effective utilization of management and group process procedures; monthly meetings of the countywide education task force, functioning as a policymaking body offering continuous input and reactions to program operation; 35-hour administrative workshop offered to administrators from BOCES and the Rockland Community College, aimed at the development of internal leaders and advocates of career education; development of 46 Career Education Teacher Guides on a K-12 spectrum and dissemination to 84 public schools; a slide tape presentation designed to orient people to the need for career education; participation by three districts in the development of a career internship program, and involvement of two districts in the allied health cluster program; and development of four "Tour de Force" programs with a local performing arts company to integrate performing arts and the development of major concepts related to work and the work ethic.

Saratoga BOCES

Community career education councils were established. A majority of the districts compiled a list of community resources and created a speakers' bureau. The BOCES and Shenendehowa Central School television facilities were used to film a variety of workers at the Saratoga Hospital. The theme of these films is "workers within a hospital." After the filming was completed, taped interviews were held with workers. Contact was made with new school districts who are interested in career education. The school districts contacted were Johnstown, Saratoga, Bolton Landing, South Glens Falls, and Whitehall. In the elementary schools, administrators and teachers were generally more accepting of the career education principles than in the high schools. Therefore the focus was at that level. The "Carrollopolis Project" was created and designed so that students could apply reading skills to the investigation and creation of a city which the students named "Carrollopolis."

The skills of reading for information, reading to answer questions, critical reading, and reading to expand knowledge in the creation of a city were combined with student development in the areas of self-awareness, employability skills, social awareness, economic awareness, societal influences, and decisionmaking.

Spencer-VanEtten

The project goal of increasing career education awareness in the schools has been met, according to evaluators. The project coordinator worked closely with the Labor Department and guidance counselors and was responsible for the training of guidance counselors by the New York State Employment Service in the administration and interpretation of the General Aptitude Test Battery. A unique activity has been the "Conversation Series" in which resource persons representing fields other than formal education are brought together with teachers in small groups for discussion and/or field trips. Training packets for grades K-12 have been developed: 32 inservice education materials, 78 curriculum materials, and two special needs materials. A document was developed describing the compatibility of career education goals with the goals of education as perceived by teachers and administrators. The document was used throughout the State. A summer session sequence was developed for teachers at SUNY Binghamton. A career education study guide was developed and distributed to administrators, board members, and guidance counselors. Mini-grants were approved for eight proposals submitted by teachers. Approximately $5,000 was used in the funding for these purposes: curriculum writing at Odessa-Montour, guidance and resource materials at Candor, "Interest Centers" in the Spencer Elementary School, and resource centers at Spencer-VanEtten High School, VanEtten Elementary School and Tioga High School.

Suffolk County BOCES #1

The vehicle for achieving this project's objectives was inservice training for teachers, counselors, and administrators. The inservice experience was designed to develop in participants the competencies and knowledge that would enable districts to achieve their stated goals in career education. The inservice training was given to 127 teachers, counselors, and administrators. Curriculum materials developed were piloted in 49 districts representing grades K-14. Teachers and counselors from these teams were involved directly with approximately 11,000 students and with districts representing approximately 130,000 students. A compilation of preliminary curriculum units was printed and distributed to 74 school districts.

Suffolk BOCES #3

The evaluator reported these satisfactory accomplishments. Alternative Senior Year Program--Career Exploration: This program was devised to provide a unique senior year experience for approximately ten students in its first year. Learning takes place, to a large degree, outside the classroom and outside the traditional school structure.

The activities are interest oriented. Each student pursues a unique program designed by himself, his parents, and a faculty member. Local board adoption is under consideration for school year 1975-76 on an expanded basis--25 to 30 students. Women and Career Education: High school teachers and students, plus authorities in the field, tested the interim report. The final report will be completed and disseminated with local funding. Career Education in Literature: Harborfields High School teachers and students, plus authorities in the field, tested the report. The final report will be completed and disseminated with local funding. Workshops, including over 200 elementary school teachers and administrators were conducted. Career Guidance in the Classroom, written by Ronald Pastranna, is in wide use throughout the State. College Seminars: Approximately 100 teachers were instructed by the project coordinator. The seminars are to be continued at Dowling College for matriculated students who are not education teachers. Newsletters: Every school in the BOCES #3 area, and every school district in Suffolk County received a copy. Elementary Publications: Ten publications were developed by local teacher-authors responsible to the project coordinator. All elementary schools in Suffolk County received copies.

Syracuse

The "Life Centered Curriculum Project" has been developing since 1971. The major objective is to revise the elementary (K-6) curriculum in the city school district to encompass the concept of career education. Involved in the program are 31 public and five nonpublic schools with an enrollment of about 26,000 public and 11,000 nonpublic school elementary students. Life Centered Curriculum units were piloted in two classrooms in each of 36 schools and after revision and refinement are currently being introduced into all K-6 classrooms. In addition to use in Syracuse, the curriculum has been extensively used in four of the VEA funded pilot projects in career education.

Yonkers

An extensive needs assessment has been completed which identified specific concerns of the Yonkers community. Techniques and activities geared to the total infusion of an effective career education program have been developed and refined. Extensive materials for utilization in elementary school classrooms have been developed and refined. The best materials, techniques, activities, notices, etc., regarding career education have been disseminated throughout the district. The staffs of the four career education pilot schools included 49 elementary classroom teachers. These school staffs also included some prekindergarten, kindergarten, special education and reading teachers, as well as counselors and principals. The efforts of this project have been perpetuated through "total infusion in the schools."

New York City--SPICE

SPICE, the acronym used for the State Project to Implement Career Education in New York City, was begun in fiscal 1973 through a special Commissioner's grant to the State Education Department resulting from a contractual agreement with the United States Office of Education and was continued on the same basis in 1974. In fiscal 1975 it received a further grant for the continuation of the project.

In fiscal 1973, three school districts, chosen to offer a spectrum of ethnic and economic backgrounds, were selected for participation in the program.

By the end of fiscal 1974, all five stages of developmental work at the elementary school level were considered to be completed, and responsibility for a continuing career education effort in these schools was transferred to the Office of Career Education (OCE) of the New York City Board of Education. A position of District Career Education Coordinator was created in the three districts and SPICE-trained personnel were hired to fill these positions and to oversee the continued development and expansion of the program at the elementary level.

However, at the junior high school and high school levels it was apparent that much work remained to be done in developing the exploratory and experiential aspects of the program. In addition, the idea of using SPICE-trained personnel to prepare new trainers in career education remained to be tested. The idea of developing a series of sequential career education lesson objectives also seemed promising.

In addition to the three junior high schools (JHS 2, JHS 57, and JHS 113) and the two high schools (Erasmus Hall and Lehman) that were carried over from the previous year, two new high schools (Boy's High and Evander Childs) were added in July. A total of approximately 190 school faculty members actively participated in the program. This total does not include participants in inservice career education courses taught by SPICE teachers, other school faculty oriented to career education by either SPICE teachers or the SPICE coordinators in departmental meetings, or educators outside of the seven schools (i.e., the bureau heads of the NYC Board of Education) who received orientation or training either directly or indirectly from SPICE. Approximately 12,000 students were affected by the program.

In July, participants from both the two new schools and the five older schools were involved in a week of workshops. Over a hundred faculty members participated. Participants from the new schools were oriented to career education, and received training in resource use, infusion, and planning. Participants from the older schools received more concentrated training in planning and were exposed to a wider variety of guest speakers in various academic disciplines. Special attention was paid to the role of the supervisor in career education. In addition, emphasis was put on training the teams in planning the

implementation of career education in their schools. Each team developed both long-range and short-range plans, and budgets of $1,200 per semester were allocated to each school for the implementation of these plans.

SPICE has conclusively demonstrated the basic validity of the SPICE process. The five steps in training (changing the attitudes of educators to career education and to schooling in general; involving educators in the design and development of their own programs and curriculum materials; involving them in the implementation of these programs and materials; involving them in the evaluation of the programs and materials they have produced and implemented; developing a cadre of managers within the school capable of overseeing the development and dissemination of this process) when given sufficient administrative support, have successfully aroused teacher enthusiasm for career education infusion and have provided the basis for a continuing effort in the seven schools. The concept of training a small cadre of trainers and career education managers, and using them to further disseminate the process, has also proven to be successful. Six additional elementary school teams were trained by former SPICE teachers who are now responsible for overseeing career education in the three districts. The OCE staff member responsible for the central board of education's input into the three districts and the four interdistrict high schools is also a former SPICE teacher, and another SPICE teacher has been hired by the Board to develop career education curriculum materials. SPICE-trained personnel have successfully trained large groups of new teachers without direct assistance from SPICE in four of the seven schools. Five schools are planning major expansion for the coming year. One school has developed and implemented its own in-service career education course based on SPICE materials and is planning to implement career education throughout the school in the coming year.

SPICE training in planning has proven effective in developing coherent, step-by-step plans for the further development of career education in the various schools. All four high schools have independently developed (and will implement) exploratory and experiential programs for the coming year, and two of the junior high schools have developed shadow-learning programs. One school has developed a required career education survey course for all entering students and is developing a more advanced course for older students. Basically, it seems apparent that career education will continue to expand and develop in five schools even without SPICE input. In one other school it will probably continue on about the same level and may be in danger in the remaining school because of insufficient administrative commitment.

Most important is the fact that an effective cadre of career education trainers has been developed. With the support from OCE, the potential exists for spreading the SPICE model of career education far beyond the 22 schools in which it now operates. It is interesting to note that one of the original SPICE districts (District 11) has received a large Federal grant for the further expansion and development of career education in the district. This process will be implemented by SPICE-trained teachers.

In summary, during fiscal 1974 SPICE training in planning bore fruit in the form of viable plans for the development of career education in the seven schools, a cadre of effective trainers was developed, and plans for career exploration programs in six of the seven schools will be implemented in September. Four "How-To" guides, five resource manuals, and several other documents were published and will be of value to other career educators. The program now seems ready for a major expansion effort and with sufficient support from OCE may be able to greatly increase the quality and quantity of career education in New York City, as well as providing a model for other programs throughout the State and the nation.

In support of the progress in career education through the VEA funded models, a major portion of New York State's Education Professions Development Act (EPDA) funds for fiscal year 1975 were directed toward teacher education in the area of career education. The focus in fiscal 1975 was on the early secondary grade levels, complementing the focus on elementary grades in previous fiscal years. In the summer of 1974, 11 institutes were conducted at various teacher education institutions throughout the State, for the purpose of training teams of selected early secondary (middle/junior high school) professional personnel (teachers, counselors, librarians, administrators) for the infusion of career education into the curriculums of the teams' own schools. Data concerning the 11 institutes are listed below.

Location	Dates	No. of Teams	No. of Participants
SUNY Albany	7/8-8/9	6	31
SUC Brockport	7/1-8/2	5	30
SUC Buffalo	7/1-8/2	6	33
Elmira College	6/24-7/26	5	31
SUC Fredonia	7/1-8/2	5	28
SUC Oneonta	7/8-8/9	6	31
SUC Oswego	7/8-8/9	5	26
Pace University:			
Manhattan Campus	7/1-8/2	6	26
Westchester Campus	7/1-8/2	6	33
SUC Plattsburgh	7/1-8/2	6	30
C.W. Post College	6/24-7/26	5	29
Totals		61	328

An integral part of the summer 1974 institutes was the preparation of proposals by each of the participating teams for staff development activities which they could carry out in their home schools after completing the summer institutes. Each proposal was reviewed, and 55 programs were ultimately funded by EPDA and became operational. Evaluators reported that the local school staff development programs varied in nature depending on the approach utilized in the EPDA institute and on local school characteristics. An estimated 1,150 local school personnel were involved in staff development activities resulting from the EPDA institutes.

EPDA funds were also utilized to provide training for the directors of similar career education institutes to be conducted for secondary personnel in the summer of 1975 at eight teacher education institutions.

VEA funding has concluded its 3-year cycle but the activity over the past 3 years has established a foundation for the continued development of career education in New York State. Five of the projects are continuing as part of an SED consortium which received funding from the United States Office of Education (USOE). These were selected as having characteristics that could be validated and which could be disseminated throughout the State. Project coordinators in four projects reported full or partial local support for the continuation of career education. Two projects received direct grants from USOE. In New York City the SPICE program has been absorbed in its career education program. Two project directors have assumed other responsibilities in addition to continuing career education activities. But most important, administrators and a corps of teachers, guidance personnel, and librarians have been trained. They understand the concept and know how to infuse career education into their curriculums.

Late in fiscal year 1975, a portion of the State's VEA funds for research was earmarked for use by Policy Studies in Education for a project entitled "Developing Materials to Aid Statewide Dissemination of Career Education." Policy Studies will assemble and produce a "quality-screened, self-explanatory" collection of the best elements in the local career education projects funded over the last 3 years. The State collection will be supplemented by references to other successful projects conducted throughout the nation. How-to-do-it materials will be an important product of the project. The purpose of the project is to assist other districts in profiting from the pilot projects as they develop their own career education programs.

- Goal: Strengthen the consumer-homemaking learnings in grades 5 and 6.

Objective

Increase the number of students in grades 5 and 6 who participate in consumer-homemaking activities.

Accomplishment

A total of 15,687 students in grades 5 and 6 participated in consumer-homemaking activities. This figure represents a decrease of 650 students from the previous year.

Description

Five school districts field tested curriculum modules and the effectiveness of the new curriculum guidelines for selecting and providing activities which help students develop consumer-homemaking skills. A needs analysis survey was developed in each instance to determine student interests and additional knowledge and skills needed.

A teacher in the Palmyra-Macedon school district wrote six consumer-homemaking modules and tested others already developed. The students were involved in activities such as: role playing which centered on self-identity and family relationships; playing educational games; giving mini-demonstrations; and preparing simple meals which meet nutritional standards.

At Morris Central School in Otsego County a teacher used modules on: extending family resources; organizing personal possessions at home; learning to eat by the four basic food groups; making and wrapping gifts; and developing crafts from nature. The students were involved in activities such as: preparing a plan for extending family resources and reporting to the class on actions taken to correct wasting of resources; keeping a record of personal diet; categorizing foods consumed into categories, and planning daily improvements; researching interesting ways of wrapping packages; planning, completing, and displaying handmade gifts; selecting and making an item useful for organizing personal possessions; examining natural materials that can be used for crafts; and preparing and displaying some craft project.

At School 84 in Buffalo curriculum modules were tested in a class for students whose severe physical limitations restricted their reading and writing abilities. The needs of these students were identified through a questionnaire completed by each student, information in the students' cumulative record files, and previous experiences with the students. The modules selected were designed to: develop leisure time hobbies which produce useful articles for the home; help students create appropriate learning environments; and encourage students to

cooperate in group activities. In a module entitled,"Developing a Green Thumb," for example, students learned how to identify, grow, and care for plants, use plants for gifts and home decorations, and identify some job opportunities related to growing plants. Two other modules used in the class were on the subjects of organizing personal possessions at home and fixing a bag lunch.

At Oxford Academy in Chenango County a teacher field tested modules such as: preparing nutritious snacks, learning to eat by the four basic food groups, working together in the kitchen, and grocery shopping. Student activities included devising simple research projects, making inventories, arranging a showcase, and preparing self-evaluation check lists. In Yonkers a teacher at a middle school tested modules on the following topics: careers in textiles and clothing; characteristics of textiles; wardrobe selection; and understanding the news.

SECONDARY

GENERAL

- Goal: Serve the increasing numbers of public secondary students who need and desire occupational education by providing diversified programs designed to meet manpower needs.

Objective

Increase the total number of public secondary students enrolled in occupational education.

Accomplishment

During fiscal year 1975, a total of 386,872 secondary level students were enrolled in occupational education programs. Of this number, 51,004 were enrolled in the BOCES area centers, 153,446 were in the major cities, and 182,422 were in other local educational agencies. The total enrollment for 1975 closely approximates that of the previous fiscal year which was 386,839. Of this total, 56,486 were in the BOCES centers, 145,519 were in the major cities, and 184,839 were in the local schools.

The decline in the BOCES enrollment is entirely attributable to: the reclassification of Mount Vernon-New Rochelle to a local educational agency; and the mistaken inclusion of the Schenectady BOCES in local educational agency data.

Description

The availability of occupational education offerings was increased last year by the opening of new facilities at the Albany Center of the Albany, Schenectady, Schoharie BOCES, Mid-Westchester Center of Westchester BOCES #2, and in the city of Albany.

Enrollment in occupational education programs also increased as a result of the addition and expansion of programs in existing facilities. A total of 14,264 students were served in new and expanded occupational education programs during fiscal year 1975. Of this total 9,112 were enrolled in 143 new programs and 5,152 were enrolled in 78 expanded programs.

New and Expanded Secondary Programs and Enrollments
Fiscal Year 1975

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
AGRICULTURE				
Agriculture Production	3		335	
Conservation	2	1	300	160
Ornamental Horticulture		3		82
Total Agriculture	5	4	635	242
DISTRIBUTION				
Automotive and Petroleum	1		50	
Finance and Credit	1		30	
Food Distribution	1		60	
General Merchandising, General Sales, or Sales-Supporting	4		135	
Hotel and Lodging	2		69	
Recreation and Tourism		1		50
Transportation and Service	3	1	82	50
Total Distribution	12	2	426	100
HEALTH				
Dental Assisting	2		29	
Medical Lab	1		16	
Nursing, Licensed Practical	3		81	
Nurse Assisting	1	3	50	124
Health-Related Technology	1		300	
Health Occupations Education, other	5	1	187	100
Total Health	13	4	663	224
HOME ECONOMICS				
Care and Guidance of Children	2	2	222	100
Clothing Management, Production and Services	1		39	
Food Management, Production and Services	6	1	187	85
Institutional and Home Management, and Supporting Services	1	1	12	30
Total Home Economics	10	4	460	215
BUSINESS AND OFFICE				
Bookkeeping and Accounting	8	5	203	240
Data Processing	5	1	1,741	750
General Office-Clerical and Typewriting	14	16	359	781
Stenographic, Secretarial, and Related Occupations	10	5	484	140

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
BUSINESS AND OFFICE (CONTINUED)				
Supervisory and Administrative Management	4	1	146	21
Total Business and Office	41	28	2,933	1,932
TECHNICAL				
Aeronautical Technology	1	1	20	300
Electronic Technology	2	2	360	180
Electro-Mechanical Technology	1		45	
Environmental Control Technology	2		110	
Other Engineering-Related Technology	1		28	
Oceanographic Technology	1		225	
Other Technical Occupations	3		106	
Total Technical	11	3	894	480
TRADE, INDUSTRIAL, AND SERVICE				
Air Conditioning, Refrigeration, and Heating	3		250	
Automotive Services	12	6	1,316	931
Aviation Operations	4		74	
Commercial Arts Occupations		3		145
Construction and Maintenance Trades	7	5	203	145
Custodial Services	2	1	23	35
Drafting		1		31
Electrical Occupations	1	1	35	31
Electronics	3	1	102	50
Graphic Arts	6	6	436	224
Law Enforcement Training	2		70	
Maritime Occupations	1		50	
Machine and Metal Industries	6	5	178	187
Personal Services	2	1	125	40
Photography Occupations		1		40
Quantity Food Occupations	1	2	39	100
Social Service Paraprofessionals	1		200	
Total Trade, Industrial, & Service	51	33	3,101	1,959
TOTAL ALL PROGRAMS	143	78	9,112	5,152

During the past year, the majority of new programs were planned and implemented with the assistance of community businesses and industries. Local facilities were utilized in providing students with valuable job-related experiences. At Monroe County BOCES #1, for example, the police science students participated in supervised learning activities at the Monroe County Sheriff's Office and the Rochester City Police Department. The child care students in the city of Rochester attended nursery schools and day care centers on a weekly basis as part of their occupational training. Since many of the children were Spanish-speaking, students received experiences in communication and learned to cooperate with paraprofessionals such as bilingual aides.

In the city of New York, the vessel M.V. Pisces was modified for use as a marine laboratory and training facility. Students from the Food and Maritime Trades High School are the operating crew for the vessel. They learn the skills of engine maintenance and repair, navigation, and seamanship. Other students, such as those in the fields of oceanography and ecology use the ship for onsite research activities.

At the Putnam, Westchester BOCES students in a new medical laboratory assisting program received training in laboratories within the community. During the first year of the program, about 50 percent of the time was devoted to laboratory practices. In the second year, classroom instruction in advanced theory was held 1 day per week while the remaining time was devoted to clinical experiences under the supervision of a pathologist.

Several programs were initiated or revised due to needs for trained employees expressed by business and industry. A number of industries in the St. Lawrence County area urgently requested the installation of a welding program at the BOCES center. Since the industries lacked their own training program they were unable to fill existing positions for welders. The program was developed and 40 secondary students received instruction in theory and practical application. The Albany, Schenectady, Schoharie BOCES developed a program at the request of many area employers for diesel mechanics. Prior to the establishment of the program, training in this field was not offered in the area. Mechanical technology was started at the Erie County BOCES #2 in response to industrial need. This new program included design drafting, machine shop, and plastics technology. The entire curriculum was designed according to local manpower needs and employment of graduates thus far has been 100 percent.

The city of New York updated their aeronautical program after employers in the aircraft industry indicated a need for technicians for testing jet engines, wind tunnel technicians, and sheet metal workers. Supersonic wind tunnel and jet technology were introduced into the

aeronautical curriculum, and electronic strain gauge operation was added to the materials testing curriculum.

In addition to identifying employment needs, business and industry has been involved in the actual implementation of programs and has often donated equipment for use by the schools. The Rochester Fire Department, for instance taught two beginning fire science classes for one quarter, and two advanced classes for a second quarter. Students responded favorably to this type of learning experience.

The Cattaraugus, Erie, Wyoming BOCES received several carburators donated by the General Motors Institute and area dealers donated a number of automobiles as well as separate engines. Additionally, the BOCES was given $1,000 worth of tile after building maintenance instructors attended a special seminar on tile setting held by a local company.

The graphics industry has undergone rapid technological changes in recent years which has necessitated the development of new and updating of existing programs. New programs were begun at Erie County BOCES #2; Allegany County BOCES; Hamilton, Fulton, Montgomery BOCES; and Ontario, Seneca, Wayne, Yates BOCES. Programs in the graphics-printing field were expanded and updated at Genesee, Wyoming BOCES, Erie County BOCES #1, and in the cities of Buffalo and New York.

In an effort to supply students with as many varied field experiences as possible, programs often included a component in community assistance. Students in the cosmetology classes in the Hamilton, Fulton, Montgomery BOCES visited county infirmaries once per week to offer their services to the elderly. These students also provided free clinical work to mothers on Mothers Day, and conducted several Golden Age Days. At a school open house the auto mechanics students provided a 10 point safety check on automobiles free of charge. This check was run periodically throughout the year with over 500 persons having their cars checked, and over 200 infractions identified.

New instructional techniques were used in programs to allow secondary students greater flexibility in selecting and continuing their occupational training. A bilingual distributive education laboratory was created in New York City. Community agencies provided the laboratory equipment, and worksheets for individualized instruction were prepared in English and Spanish. About 240 students received training in sales and sales-supporting activities required for employment in retail establishments including display, advertising, sales promotion, cashiering, and sign making.

Nassau County BOCES instituted autotutorial lessons for multioccupational courses. Approximately 150 titles were validated and produced for use in individualized instruction. Examples of these titles are: auto mechanics, commercial art, offset lithography, dental assisting, retail business management, drafting, photography, and air conditioning and refrigeration.

Unique instructional methods were utilized in the business law curriculum by the city of Yonkers. Materials were provided by the New York State Bar Association to supplement the classroom instruction in the consumer law area. A television showing of the movie "Double Indemnity" was used to exemplify the laws regarding life insurance claims. Newspaper articles and personal experiences of students demonstrated many of the principles being studied.

Modular programming was extensively used this past year as a means of improving the quality and availability of occupational education offerings to all students. Area centers reporting the use of modules were numerous. The following are just a few examples. The Jefferson, Lewis BOCES and the Monroe County BOCES #1 revised their auto mechanics curriculums into modular units. Course enrollment expansion in the Washington, Warren, Hamilton, Essex BOCES was accomplished through the use of modular programming. Shop space was more efficiently utilized as related subject matter was taught through modules of instruction outside the regular assigned shop. Courses in the business subjects in the Herkimer, Fulton, Hamilton, Otsego BOCES were divided into modules allowing students to select subjects such as advanced office machines, data processing, machine bookkeeping, and computer programming. The Dutchess County BOCES building specialities program in its second year introduced the modular approach with a great deal of success. Modules included roofing, flooring, installation of doors, and siding. Nassau County reported that many modules were added to their overall program during the past year. The total course of electronics was completed in modular form as well as the auto mechanics course, and multioccupational courses including offset printing, welding, commercial art, and dental assisting. Air conditioning and refrigeration students in all centers participated in a pilot modular program in the related field of sheet metal fabrication and installation.

An interesting auto mechanics program developed by the Orange County BOCES enabled 1st year students to study in three shops under three instructors. The individualized instructional approach included self-paced packets containing job sheets, operation sheets, and assignment sheets. Prescribed skills were previously determined by an employer survey, and each student's accomplishments were recorded to enable future employers to evaluate their skills.

Local school districts continued to expand and improve office and distributive education programs introducing several innovations. In Islip, for example, a modular approach was started, in the business program to provide greater flexibility than was possible in isolated courses. Office simulation was developed to give students more realistic in-school experiences. The teacher did not assign tasks but instead students worked together as members of a team organizing work and setting priorities. The students developed a wide range of skills by rotating through several office positions.

Ancillary personnel were supported to coordinate various aspects of secondary programs in order to make them more efficient and effective. Among these were coordinators of planning, program development, and cooperative education. Funds were expended in New York City to support the Health Careers Coordinating Unit which administers and coordinates programs serving 20,000 persons. The function of this unit is to prevent duplication, expand and develop innovative programs, monitor existing programs, and ensure that all students are made aware of the career options in the health field. Efforts to improve articulation with local colleges has been an important aspect of this unit's activities. Funds were also provided for a planning coordinator at the Onondaga, Madison BOCES so that the needs of the BOCES for new programs and facilities could be carefully assessed, and a thorough plan for meeting these needs devised. An occupational education task force was assembled and the needs assessment aspect has been nearly completed. Program plans and an implementation schedule are in the working stages.

Federal funds were also expended during the past fiscal year for the development of special demonstration projects relating to innovative practices in occupational education for secondary students in selected local educational agencies. The trend within these special projects was to improve instruction and evaluation in occupational education.

At Nassau County BOCES the goal of one proposal was to develop instructional materials in an autotutorial format to be used on an individualized basis for the instruction of students in the multioccupational exploratory program. Many of these students had learning disabilities. A study of students in the BOCES programs indicated that one-third were reading 3 or more years below grade level. Consequently, the autotutorial format emphasized learning with a minimum of reading in order to overcome the difficulties encountered by these students. Many of the materials developed were also suitable for use in career education programs in grades 7-12 throughout the State. Inservice training for teachers in the development and use of autotutorial materials was a locally funded aspect of this project.

Nassau County BOCES also expanded a model program designed to bring occupational education programs at the BOCES into compliance with OSHA (Occupational Safety and Health Act) regulations. This project will also serve as a guide for other LEA's in improving safety practices and instruction in their occupational programs. The changes needed to meet with OSHA regulations were identified and implemented. Autotutorial learning packets were produced to integrate OSHA materials into the instructional processes. Construction trades received special attention in the program since 83 percent of occupational fatalities in the Long Island area during the previous year were construction-related. One objective of the program was to obtain State certification for high risk programs so that graduates under the age of 18 could be employed without restriction in their occupations.

Curriculum development in occupational education, particularly with respect to performance objectives, has been advancing rapidly. The need for performance examinations to evaluate student competencies is therefore becoming more urgent. Consequently, New York City developed a proposal concerned with the planning and writing of pilot performance tests and comprehensive tests in several occupational areas. Performance tests were written for plumbing, cabinetmaking and auto body repair. Comprehensive tests were prepared for trade electricity, dental office assistant, climate control mechanic, and auto body repair. Representatives from industry served as consultants in the planning and evaluation of the tests.

Objective

Increase the number of secondary students enrolled in cooperative work experience programs.

Accomplishment

A total of 27,966 secondary students were reported to be enrolled in cooperative work experience programs during 1974-75, an increase of 11,757 over the previous years' total. It is firmly believed, however, that the design of the data collection instrument was not specific enough to exclude students participating in other forms of learning and working arrangements. The previous years' total of 16,209 was repeated in the fiscal year 1976 State Plan to accommodate the projection of enrollments through 1980. A recent study outlined in the description of the objectives, was made to classify and analyze all types of work experience programs offered in New York State.

Description

During the past fiscal year Federal funds, specially designated for cooperative work experience purposes, were used to support projects conducted in urban areas of the State. Approximately 4,000 students were served in expanded cooperative programs in the cities of Albany, Buffalo, Rochester, and Syracuse and in the densely populated areas of Nassau, Westchester, and Suffolk Counties. Thirty nonurban BOCES centers also reported that work experience programs were conducted utilizing local funds and Federal funds earmarked for secondary level program expansion.

Traditionally, a major function of Federally funded cooperative work experience programs has been to provide students enrolled in regular occupational programs with realistic on-the-job experience designed to supplement or reinforce the occupational skills acquired and to ease the transition between school-based instruction and actual employment. In some cases cooperative programs can serve other functions as well. In Rochester, for example, the diversified cooperative program provided on-the-job skill training in occupational areas not included in the

regular occupational program thereby broadening the overall program and increasing the students' options. The program provided experiences for students in establishments such as: banks, schools, libraries, insurance firms, supermarkets, food service establishments, health service institutions, auto service stations, police and fire academies, social and civic agencies, retail stores, and youth service centers.

At Suffolk BOCES #3 the cooperative program contained a career awareness segment. The coordinator arranged trial employment situations for students; disseminated information concerning various occupational fields; recruited guest speakers from business and industry; and conducted programs in each of the five participating schools where a new major career was introduced weekly.

In some of the federally funded programs personnel other than cooperative coordinators were hired to perform various specialized functions to increase the efficiency of the cooperative program. Job developers who canvassed the community for employers interested in participating in the cooperative program were hired in the city of Yonkers, for example. Each of the job developers had an area of special responsibility: business and distributive education; agriculture, health, trade and industrial education; and special education.

Two paraprofessionals were added to the work experience placement staff at Nassau County BOCES. They handled various ancillary duties formerly performed by work experience counselors, thereby substantially increasing the number of students who could be served. Some of the tasks performed by the paraprofessionals included: gathering preliminary information on students; arranging for the completion of required forms; assembling instructional materials; gathering employee evaluations; and participating in youth opportunity days.

Last year steps were taken to analyze and categorize the cooperative occupational education programs in New York State. A survey intended to encompass all types of combination work/school programs in operation was sent to chief school officers for the collection of information on program classification, characteristics, instruction, administration, and coordination. This study of current work and school programs in operation has been completed and findings summarized. A report is now being prepared which will be distributed to Education Department personnel for use in future program development and evaluation. Statistics and trends useful for occupational education teachers and administrators also will be published and disseminated.

- Goal: Provide secondary occupational education students with the basis for continuing their occupational education at postsecondary institutions.

Objective

Increase the number of secondary occupational education graduates who continue their postsecondary education.

Accomplishment

According to the followup section of the Reporting and Evaluation System for Occupational Education (RESOE) 32,431 of the June 1974 graduates of secondary occupational education programs enrolled in postsecondary programs, compared to 21,459 entering postsecondary education the previous year.

Description

The end-of-year reports submitted by the occupational education directors indicate that 26 BOCES area centers and the cities of New York, Rochester, Buffalo, and Yonkers have programs which are articulated with postsecondary institutions. Three other BOCES reported that plans had been made for articulation in the near future.

As in previous years articulation efforts were designed to eliminate expensive duplication of services, equipment, and faculty; facilitate the enrollment of secondary level occupational education graduates in postsecondary institutions; and assure that all persons in a region in need of training are provided programs by the agency best suited to meeting their needs.

Seventeen secondary agencies reported that graduates of some of their programs had been offered either college credits or advanced standing at the postsecondary level last year. The Orange County BOCES credit transfer arrangement with Harriman College was typical of this type of articulation. Graduates from the BOCES child care program were able to receive from 6-11 credits at the college if they received their teachers' recommendations and were able to document their clinical experiences.

Another common form of articulation last year was coordination of programs to eliminate duplication of subject matter and to produce sequential course content. Eleven BOCES and the cities of Buffalo and New York indicated that they had participated with nearby 2 and 4-year colleges in coordinating services. These efforts often resulted in elimination of courses offered at both agencies, revision of curriculum materials, and development of courses previously not offered by either type of institution.

Six BOCES centers and the city of Rochester reported articulation of programs by sharing facilities, equipment, and instructors with postsecondary institutions. At Chautauqua County BOCES, for example, data processing students spent one semester at Jamestown Community College studying basic computer programming and operation on an 1130 IBM computer. The instruction was provided by the college's computer programming personnel. In Nassau County BOCES, students in the animal science program use certain facilities of the animal husbandry program at Farmingdale Agricultural and Technical College during the summer. Similarly, the biological sciences division of the college utilizes the small laboratory animal facilities at the BOCES County Center.

The programs most commonly articulated last year were: nursing, data processing, auto mechanics, child care, medical laboratory assisting, animal sciences, and construction. Sixteen secondary agencies reported articulation of more than a single program.

- Goal: Encourage youth to participate in student organizations which foster leadership abilities.

Objective

Increase membership in youth organizations which promote leadership and service activities.

Accomplishment

Total membership in youth organizations was 22,715 during 1975, representing an increase of 272 over the previous fiscal year's membership. Each of the individual clubs, with the exception of FHA, also experienced growth in enrollments. The membership in each club was as follows:

DECNY	4,220
FBLA	2,625
FFA	5,962
FHA	2,359
VICA	7,549

Description

While the organizational structure of each of the five clubs differs slightly, the leadership training cycles throughout the year were basically the same for all clubs.

State and regional officers began their term of office by participating in the planning of the Combined Leadership Training Week which is held each summer at Camp Oswegatchie in Croghan, New York. The participants developed a schedule of activities, determined topics to be covered, discussed lesson emphasis, and organized cooperative efforts between the youth organizations for the week.

These planning sessions were followed by the training week itself during which the State and/or regional officers from all five clubs participated. The training consisted of an intensive series of individual and group meetings designed to prepare officers to assume a leadership role in occupational, social, and civic responsibilities. Topics such as public and extemporaneous speaking, planning large group activities, qualities of a good teacher, how to conduct a meeting, officer conduct, communications, using groups, publicity and image building, increasing membership, and duties and responsibilities were covered. Several clubs followed up this training period at camps or other regional meeting places during which the newly trained State officers instructed local and regional officers in the same principles learned during Combined Leadership Week.

During the school year the youth organizations conducted programs for district and local officers at regional sessions. The State leaders of each group met one or more times during the year for leadership training, workshops, officer elections, and skill competitions. The purpose of these sessions was to prepare students to lead their organizations and to create more recognition of youth groups on the part of other students, industry, and the community.

Youth organization participants again last year used their skills to improve the community while creating a favorable public image for occupational education. Students were involved in a variety of community service activities including bicentennial programs; services to senior citizens, the handicapped, and the economically disadvantaged.

A study was done cooperatively by the New York State Education Department's Bureau of Occupational Education Research, and the Youth Leadership Development Unit for the purpose of ultimately developing a long range plan for strengthening student organizations. The objectives were: to identify the "State of the Art" of the five youth associations; and to determine the feasibility of an occupational youth organization serving all program areas. A document including enrollment statistics, materials on youth club goals and activities, and a model for a cooperative organization composed of autonomous divisions of the five youth organizations was prepared. This proposal is currently being reviewed by Education Department staff and during the year will be reviewed on a regional basis for possible refinement and eventual implementation.

Objective

Provide additional teachers with inservice education opportunities related to student organizations.

Accomplishment

A total of 72 teachers attended workshops at Canisius College in Buffalo, and at State University of New York Colleges at Plattsburgh and Oswego for the purpose of strengthening their understanding and methods of working with student organizations. Comparing this number to the 1973-74 figure, 43 additional teachers were served.

Description

Some of the objectives of the inservice program at Oswego were to assist teachers in: understanding the value of the VICA Youth Club activities in strengthening occupational trade and industrial programs; organizing and supervising VICA club activities at National, State, and local levels; conducting youth club activities which promote leadership development as well as skill development; selecting and organizing leadership development instructional materials; and organizing local skill contests for trade and industrial education students. Learning activities during this 1-week summer workshop included lectures, demonstrations, role playing, and group discussions, which were followed by individual study at participants' home schools. The results of this workshop were the establishment of three new VICA clubs, the formation of a VICA Advisors Association, and the improvement of VICA activities in local clubs. These accomplishments were further strengthened during a VICA seminar held in Syracuse during the fall.

The summer inservice workshop at Canisius College served 21 business teachers who were current or prospective advisors of FBLA. Members from the Board of Trustees, State Officers, representatives from the National Office, and State Education Department personnel were present to provide information on: methods of starting chapters, possible projects and State activities, the structure of the State organization, and the goals and activities of the State Leadership Conference.

Twenty-three home economics teachers attended a curriculum planning FHA/HERO workshop sponsored by State University of New York at Plattsburgh. This workshop explored the organizational structure of the clubs and the integration of their activities into the classroom structure. Additional description of this workshop is provided under the secondary level objective to provide workshops which focus on relevant content and effective methods of teaching consumer-homemaking skills.

- Goal: Strengthen the preparation of secondary occupational education teachers.

Objective

Increase the number of secondary occupational education teachers who participate in inservice activities.

Accomplishment

VEA funding provided 29 inservice programs serving 628 secondary occupational education teachers. It is estimated that a total of 7,900 secondary occupational education teachers participated in inservice activities. These figures are close to previous planning estimates. It was projected in the State Plan for fiscal year 1975 that a total of 7,920 teachers would participate in inservice programs and 710 would be served through VEA funded programs.

TITLE OF PROGRAM	LOCATION	ENROLLMENT
Agricultural Education		
Dairy Cattle Health	Cornell University	12
Tractor Fuel Systems	Cornell University	12
Electricity in Agriculture	Cornell University	6
Greenhouse Management	Cornell University	20
Solid and Liquid Waste Disposal	Cornell University	13
Timber Marketing and Harvesting	Syracuse College of Forestry	11
Business Education		
Self-Paced Instructional Strategies	Hofstra	30
Word Processing, Methods and Materials	New York University	26
Self-Paced Instructional Strategies	SUNY/Albany	30
Mathematical Competencies Essential to Office Practice	Canisius	29
Distributive Education		
Industrial Marketing-Wholesaling and Advertising Services-Visual Merchandising	Syracuse	30
Home Furnishings Sales and Service, Finance and Credit	SUC Buffalo	23
New Developments in Distribution and Marketing	New York University	30

TITLE OF PROGRAM	LOCATION	ENROLLMENT
Health Occupations		
Leadership Workshops	SUNY/Buffalo	23
Program and Performance Evaluation	Syracuse	29
Techniques and Resources for Teaching Health Occupations Education	SUNY/Stony Brook	19
Home Economics		
Evaluation of Job Competencies	Syracuse	30
Needs of Health Handicapped Students in Home Economics (Part F)	Queens	30
Curriculum Workshop in Home Economics (Part F)	SUC/Oneonta	36
Helping Preservice Home Economics Teachers Understand, Recognize and Meet the Needs of Disadvantaged	Lehman	11
Trade, Industrial and Service		
Printing	SUC Buffalo	21
Plumbing and Heating	SUC Oswego	20
Commercial Art	SUC Buffalo	20
Auto Mechanics	New York Institute of Technology	15
Carpentry	SUC Oswego	20
Appliance Repair	SUC Oswego	20
Masonry	SUC Oswego	20
Youth Organizations		
VICA	SUC Oswego	21
FBLA	Canisius	21

Description

The inservice programs offered during fiscal year 1975 for occupational education teachers focused on increasing general depth of knowledge, providing new strategies for classroom instruction, and increasing understanding of curriculum construction.

The teachers of agriculture were given the opportunity to increase their knowledge and skills in dairy cattle health, diesel tractor fuel systems, electricity in agriculture, greenhouse management, and solid and liquid waste disposal. Those teachers interested in timber marketing and harvesting were able to utilize the facilities and staff at the New York State Ranger Training School at Wonakena, New York.

Business education teachers received assistance in the development of self-pacing instructional strategies. The purpose of this effort was to make the classroom more responsible to the individual needs of the student. Since many of the students in business programs find employment in large offices where "word processing" is common, the teachers were given the opportunity to discover for themselves what the system involves. While typing and shorthand are considered to be the essential skills for any office practice class, many of the teachers were upgraded in the mathematical competencies essential to office practice.

The inservice training of distributive education teachers during this year centered around the development of modules that would fit into the new State curriculum.

As a result of the steady growth in the health occupations, health education teachers were provided the opportunity to acquire new ideas in program and performance evaluation as well as to learn about new techniques and resources for teaching health occupations.

Looking ahead to the development of competencies that will be required because of the State Education Department movement into competency-based teacher education, home economics teachers were assisted in evaluating job competencies needed by their teachers. Home economics teachers identified the needs of the health handicapped students and participated in workshops designed to determine the components needed in the new curricula being introduced.

Teachers in the trade, industrial, and services areas attended 2-day workshops generally taught by industry personnel. These workshops were short-term, skill-development oriented.

Faculty advisors for student organizations in business and trade and industry attended workshops taught by national leaders as well as outstanding advisors in the State.

- Goal: Expand and strengthen programs and services at the secondary level which improve consumer-homemaking skills of youth.

Objective

Increase the total number of secondary students enrolled in consumer-homemaking education.

Accomplishment

In 1974-75, enrollment in consumer and homemaking education was 126,086 in grades 7 and 8, and 121,798 in grades 9-12. During the 1973-74 school year, 125,307 and 124,371 students were enrolled in grades 7 and 8, and 9-12 respectively.

Description

A continuing activity in consumer-homemaking education has been the initiation of pilot projects. During 1975 several projects were conducted which were designed to test the effectiveness of the new modular curriculum format in meeting the expanding needs of students for knowledge and skills as consumer and family members.

The 50 teachers who participated in the field testing of the modular curriculums completed a graduate level workshop focusing on the revised format for curriculum planning. Thirteen of the teachers working with grades 7 and 8 tested the efficacy of planning and teaching courses composed entirely of instructional modules. The modules tested were in the subject areas of human development food and nutrition, and clothing and textiles. Content emphasis included: management, "buymanship," leisure, career, health and safety, and relationships. The teachers revised existing modules and planned new ones to meet local needs which were determined through various studies.

Students in grades 7 and 8 who were exposed to these modules were involved in activities such as: individual exploration of careers; visiting senior citizen institutions to promote understandings and communication skills; analyzing advertisements and labels; researching and comparing advantages and disadvantages of charge accounts; comparing the costs of home prepared, home heated, and ready to eat foods; scheduling jobs which contribute to improved home living; and preparing foods.

Students also made visits to cafeterias to observe their management and the various jobs performed; and to dairy farms to increase their understanding of milk production and marketing processes. Following the latter, the students analyzed recipes to determine the uses of milk; researched the varying milk requirements of people; and learned the principles of milk cookery.

In grades 9 and 10 modules were planned and implemented in the content emphasis areas of buymanship and leisuretime. These modules cut across all four subject areas. Modules for four courses were also developed in the subject area of clothing and textiles. These modules in turn included all six content emphases.

Module planning and development at grades 10 and 11 was accomplished for three courses in the subject area of human development; one course in housing, furnishings, and equipment, and one course in the content emphasis area of buymanship.

At the 11 and 12th grade levels, the following seven subject area courses were implemented: two in food and nutrition; one in clothing and textiles; and four in human development. One content emphasis course was planned and taught in buymanship.

At all levels each course differed in behavioral outcomes established, modules used, learning experiences selected, and measurement procedures employed. Reports from the teachers indicate that the use of modules permitted greater flexibility and effectiveness in meeting student needs; and enabled selection and use of a much greater variety of learning experiences.

Objective

Increase the number of public school home economics teachers who participate in inservice activities which focus on relevant content and effective methods of teaching consumer-homemaking skills.

Accomplishment

The number of home economics teachers participating in inservice activities during fiscal year 1975 was 1,200, thereby far exceeding the projection of 200 indicated in the 1975 State Plan.

Description

Last year workshops and institutes for consumer-homemaking teachers continued to focus on development and utilization of modules and on upgrading the skills of beginning, returning, and out-of-State trained teachers.

Queens College conducted an inservice workshop for 27 home economics teachers which focused on understanding and meeting the needs of health handicapped students. Learning experiences designed to meet these objectives included: consultation with expert classroom teachers who had been involved with special education; presentation and resource assistance from the psychologist-director of the college program in special education; consultation with a parent who has been influential

in improving education for handicapped students; field trips to public and private special education facilities; case studies of handicapped children; and interaction during class sessions among participants with regard to their own experiences with such children.

In addition, instruction was given on the current reorganization of home economics in module format. Each of the teachers developed a module with particular applicability to handicapped students.

An evaluation of the workshop revealed that the course had met its overall objectives. Participants all indicated an improved frame of reference for serving and focusing on the needs of handicapped students and most thought that the experiences in the course stimulated them in their planning and teaching as well as in seeking more information on handicapped students.

One hundred five home economics teachers also participated in one of three inservice institutes sponsored by the State University College at Oneonta and held in Binghamton, Utica, and Oneonta. The subjects explored were consumer education, housing, metrication, and family life. The teachers were acquainted with the resources for subject matter specialization as well as with educational and technical advances which would aid them in disseminating information to learners.

Five graduate level workshops offered at colleges in Buffalo, Oneonta, Ithaca, and Plattsburgh enabled 160 teachers to plan and develop instructional modules. In the workshops at Cornell, for example, some of the specific activities included: orientation to the new home economics State curriculum, the module approach, and content emphasis; large group presentations and small group sessions devoted to module development; panel discussions focusing on State curriculum modules and curriculum materials already developed; work sessions in which participants shared and evaluated modules, focused on how local curriculums can be developed around modules, and planned a course based on modules; small group sessions on developing units, independent study packets and courses based on modules; and evaluation of the workshop, its objectives, and the modules developed.

Twenty-three home economics teachers attended a curriculum planning through FHA/HERO workshop sponsored by SUNY at Plattsburgh. The project objectives were as follows: developing a historic perspective of the value of FHA-HERO programs for home economics and related education; gaining indepth knowledge of the ACTION IMPACT program and how it can be utilized to enrich regular classroom work; developing skills as advisors to local chapters and in working with regional and State groups developing techniques for introducing and developing a FHA/HERO chapter; and creating specific plans for improving existing chapters.

- Goal: Improve the quality and reduce operating costs of occupational education programs by providing permanent area occupational center facilities.

Objective

Provide permanent facilities at area centers where they are needed.

Accomplishment

Carryover fiscal year 1974 Federal funds were not used for construction of new facilities during the past year as had been identified in the 1975 State Plan. The funds available were used instead for program development purposes for the disadvantaged at secondary and adult levels.

SECONDARY

DISADVANTAGED

- Goal: Assist disadvantaged secondary students who need and desire occupational education to successfully complete high school and to obtain meaningful employment and/or continue their education.

Objective

Increase the number of disadvantaged secondary students enrolled in occupational education.

Accomplishment

In the 1974-75 school year, a total of 97,494 secondary occupational education students were reported as disadvantaged compared to 92,000 in 1973-74. Last year, 6,799 students were enrolled in the BOCES centers and this year only 2,459 were reported. The apparent decrease is due to two factors: changes in the configuration of agency data as mentioned in the statistical preface of the report; and the difficulty and reluctance on the part of teachers to identify the special needs of students early in the school year when the reporting of enrollment data is made. The major cities reported an increase of 11,920 students. A total of 6,899 disadvantaged were reported by the local schools in comparison to 9,185 in school year 1974.

Description

Disadvantaged secondary students were served through the addition and expansion of programs. Last year, 1,459 students were served in 21 new programs and 18 expanded programs enrolled 1,531 additional students.

Whenever possible disadvantaged students were enrolled in the regular school occupational education program with the assistance of supplementary services and/or remedial instruction. Each year methods of more adequately serving the disadvantaged segment of the population are developed and refined. Programs employing successful instructional techniques continue and expand.

The multioccupational program has proven to be useful in acquainting students with careers and assisting them in making more knowledgeable choices. Many students in multioccupational programs subsequently were able to enter the regular occupational education curriculum. The city of Syracuse continued a multioccupational program encompassing jobs within the health field. With the assistance of guidance personnel, 9th and 10th grade students were selected to participate in a 2-week program conducted at the Upstate Medical Center. There they were tested

to determine occupational preferences and potential. The students then toured the hospital observing and talking with employees functioning in a variety of jobs. Last year 226 students observed persons in more than 30 occupations including bioengineering, hematology, and facilities planning.

An exploratory program at the Suffolk County BOCES #1 provided students with exposure to health assisting, graphic communications, office, building trades, and transportation trades occupations. Each student was assigned to an occupational cluster and completed that cluster at his or her own pace before moving on to another. Remedial instruction in reading and mathematics was available.

Learning disabled students at the Foreman Center of the Monroe County BOCES #1 were offered a multioccupational program of nine courses paralleling career education cluster concepts. Students rotated through modules of instruction in courses such as turf management, human services, power mechanics, graphic arts, and recreational careers. After students selected an occupation, they enrolled in the regular program with any necessary remedial assistance. Of 63 students enrolled in the regular curriculum, 58 completed the year and 12 finished advanced training. All of the multioccupational teachers attended biweekly in-service programs offered by the learning center junior-senior high school for the learning disabled and educable retarded.

A new program created by the city of New York familiarized disadvantaged students with a number of diverse careers. Laboratories within a school were designed as career centers simulating work activities in career clusters such as manufacturing, construction, communication and media, business, and marketing. Actual visits to local industries were made periodically during the year. In an attempt to make the academic curriculum more relevant, the local school provided basic skill training in math and reading related to career activities.

A variety of instructional methods were employed last year to more effectively serve the particular needs of the disadvantaged. The Tompkins, Seneca, Tioga BOCES, for example, designed a program in general trades to help students to develop skills in the areas of machine woodworking, sheet metal, welding, metal fabrication, and small engine repair. Students selected four of the 10-week modules and progressed at their own rate. Because these students often had reading problems, emphasis was placed on learning by activity and many audio-visual aids were effective.

The city of Syracuse implemented a new approach to teaching the distributive occupations to disadvantaged students. An instrument used in the program was self-paced learning packets. All students began with a distribution and marketing phase and then proceeded at their own rate through as many segments as they could master. This approach allowed students to select from a wider variety of skill areas including sales promotion, communications, human relations, credit, data processing, advertising, and marketing research.

A unique new program in New York City involved students in the formation of mini-companies. This type of experience allowed them to experience processes such as raising capital, conducting meetings, developing products and doing marketing research. The involvement of academic subjects in the occupational disciplines made this learning more meaningful for the students. Another interesting new program in New York City provided low achieving students with training in the rapidly expanding fields of marine maintenance and marine electronics. Instruction centered on repair and maintenance of small boats, their power plants, and electronics equipment. Subject matter was organized into eight non-sequential learning programs so that students could begin the programs at any one of several points in the school year. Another advantage of this type of scheduling was that those students who elected to drop out of the program had at least completed a few skill units.

An individualized learning resource center was formed by the Genesee, Wyoming BOCES to enable students to learn at their own pace, review classwork or trade operations missed during an absence, and to explore topics of interest indepth. Furniture designed for individual study was selected and purchased and will be ready for use in the next school year. Recognizing the lower reading scores of prospective students, equipment and materials such as slides, filmstrips, cassettes, and records were acquired. The Resource Center has been carefully equipped to accommodate the individual needs of students. The development of instructional material modules will be encouraged by providing the necessary inservice training to local teachers.

Alternative learning programs also have been developed to serve students not succeeding in the regular school setting. In New York City, for instance, a program operated in several locations near student work sites. In one of the locations students received skill training, job experiences, and career guidance through the help of educational assistants. After training, students were transferred to one of the other locations for work experience. Funds were allotted to the Bronx Career Campus which combined alternate educational facilities and community resources in one unit. The major components of the campus are the counseling center, skill center, and the shared instructional services program. The counseling resource center is open all year with evening and weekend hours to accommodate all members of the community. A 24-hour "hotline" telephone service and the publication of a newsletter supply employment information. Up-to-date career education materials as well as demonstration booths to provide "hands-on" experiences. Aptitude and inventory tests are given on a periodic basis, and students are counseled accordingly. The skill center offers occupational training with the use of new equipment. Subject areas which complement existing programs at other Bronx educational facilities are offered. The shared instructional services program permits students to move freely in and out of a school

so that they may receive occupational education at the skill center, the vocational high school, or other facilities. This training is accredited toward their home school diploma.

An occupational learning center developed in the city of Syracuse is an alternate high school program designed to serve secondary school youth not able to cope with the demands of a regular school program. The program is focused on career education and includes a totally individualized curriculum based on each student's needs and educational level. Requirements for graduation include preparation and performance in employability skills and high school subjects, as well as a functional awareness of the job market and personal goals. The emphasis of the program is on career education, occupational training, and on-the-job work experience.

As mentioned previously in this section, programs were developed with reading and mathematics components of offer disadvantaged students remedial assistance while they receive occupational training. The Oswego County BOCES employed a reading coordinator to work with students within their course content helping students reach course objectives they may not have been able to reach because they lacked adequate skills. The main purpose of the program is to help students reach maximum employability, however, it is hoped that reading in connection with occupational training will promote a more positive attitude toward reading. After methods of identifying problem students have been used, the reading coordinator meets with faculty, holds conferences with students' occupational education teachers; visits the classroom, prepares materials which relate the occupational and academic curriculum, tutors students part of the day when necessary, and maintains a resource center containing lessons and reading materials for various occupations.

Several BOCES centers reported that teachers had participated in inservice programs. Chautauqua County BOCES, for example conducted three workshops in addition to in-group sessions. Two graduate courses dealing with the disadvantaged and handicapped were offered at the LoGuidice Center through SUNY at Buffalo. The Madison, Oneida BOCES operated an inservice program for teachers in their region to explore and implement modular instruction for disadvantaged students. New York City offered several programs in business and distributive education to acquaint teachers with new methods in their fields. Saturday workshops were also held serving approximately 660 teachers.

Federal funds were used to support seven projects designed to serve disadvantaged youth in urban areas of high youth unemployment and high school dropout rates. The projects were also intended to provide access to disadvantaged students enrolled in nonprofit private schools. These programs were conducted in the cities of Buffalo, New York, Rochester, and Syracuse and at Nassau County BOCES.

As in past years high priority was placed on serving disadvantaged students who could not attend regular occupational courses. The city of Buffalo offered a program of occupational instruction in each of its six vocational and technical schools from 3:30 to 5:30 two afternoons per week. New York City conducted training programs in the areas of trade and industry, health, business, and distributive education on 2 weekdays after school hours. Rochester also provided entry-level skill training units at six skills centers convenient to disadvantaged students 2 days per week in the afternoon. In addition, the participants in this program were given entry-level, summer full-time jobs in 13 occupational areas.

The instruction in these programs often had a work experience component. New York City conducted a human services internship program in which disadvantaged students were placed in jobs at sponsoring institutions having human services programs 4 full days per week. The students participated in activities appropriate to a particular job. The training included exercises, assignments with agency clients, instruction in filling forms and preparing reports, and participation in staff meetings. One day each week seminars were held with teacher coordinators in which the interns' logs were read and problems discussed in small groups. Another New York City project combined intensive instruction with on-the-job experience in the field of child care. Students were assigned on an alternate week basis to participating day care centers. Two periods per day they attended classes in their homes. As previously mentioned, Rochester's program also had a work experience component. Instructors provided a 1 hour of related instruction per week and supervised the students on the job sites during the summer.

The program in Syracuse was basically a cooperative work experience program. In addition to experience on the job, some of the students were served by counselors at the occupational learning center while others received individual instruction from two coordinators.

Within all of these special programs emphasis was placed on providing a wide range of guidance and supportive services. In addition to developing skills through instruction and work experience, concentration was placed on providing counseling, orientation, prevocational evaluation, and followup during the on-the-job experience.

The two programs for special segments of the disadvantaged population funded under this purpose that were conducted by Nassau County BOCES were intended to serve out-of-school youth and adults. These programs will be described under the adult disadvantaged section of this report.

Last year Federal funds were also available for the development of special demonstration projects designed to meet the occupational education needs of secondary disadvantaged students in selected local

educational agencies. An alternative learning project conducted by Rensselaer, Columbia BOCES was funded for this purpose. Approximately 160 disadvantaged students who were unable to succeed in the conventional school setting were given basic instruction at learning centers and facilities which were not located within the regular school building. Both the public and private sectors of the community were utilized for occupational training and work experiences. Following a series of diagnostic tests, each student's schedule was determined on an individual basis by the center's staff of one counselor and two instructors. These students, with low reading and/or mathematical scores and poor records of attendance were able to progress at their own rates within a program of integrated academic and occupational instruction. The program was designed to provide all students who completed with either a salable skill or preparation for postsecondary study.

Continued support was provided for a demonstration project in New York City between the auxiliary services to high school program and approved private occupational schools for the purpose of expanding occupational services to students in the auxiliary services program. This program was designed specifically to meet the needs of students who have a combination of academic, socioeconomic or other handicaps which prevent their adaption to the regular school setting. In conjunction with their alternative high school equivalency preparation, the program provided individualized occupational training in a private trade school in courses either not available in the public schools or offered at a time inappropriate for the student. The short concentrated courses prepared 150 new students for entry level occupations.

Objective

Increase the number of disadvantaged students enrolled in cooperative work experience programs.

Accomplishment

A total of 4,481 disadvantaged students were reported to be enrolled in cooperative work experience programs during 1974-75, an increase of 373 over the previous year. See accomplishment of secondary general cooperative objective for explanation of the 1975 figure.

Description

Approximately 1,600 students were enrolled in Federally supported cooperative work experience programs serving disadvantaged students in urban areas. These programs were located in the cities of New York and Rochester and in Nassau County BOCES. In addition, 11 BOCES reported offering work experience programs for disadvantaged students by using State and local funds and Federal funds designated for overall secondary level program development and expansion.

A continuing emphasis in cooperative programs for disadvantaged students has been to provide motivating work experiences which create student interest in learning and occupations and thereby decrease the likelihood of failure. Remedial assistance, special on-the-job supervision, and pre-employment exploratory experiences were often components of the program.

Nassau County BOCES conducted an expanded 9-week summer cooperative program for minimal achieving students. One hundred fifty first-year occupational students who were potential dropouts were placed in jobs relating to their occupational interests and training within the BOCES complex and in various public supported agencies. Extensive counseling and field trips were provided to supplement the carefully planned work experience. In addition, peer group discussion sessions were held during which the participants explored various methods of improving their self-image and employability attitudes.

Also at Nassau County BOCES two work experience placement counselors were added to the staff to work with approximately 200 disadvantaged students and 100 handicapped students. All of the students required intensive occupational counseling and employability development in addition to services normally provided for work experience enrollees. The counselors worked with local employers to obtain suitable work stations for the students; developed a training program in accordance with the students' abilities, communicated with community agencies which provided remedial and rehabilitative services; and maintained a careful record of student performance and progress.

Over 800 students were served in the cooperative work experience program in New York City with about 1,000 students receiving services supported through Federal Vocational Education funds. Although 70 percent of the students were considered economically or educationally disadvantaged the dropout rate in the cooperative program was only 5 percent. Student enthusiasm for the program is also demonstrated by the fact that enrollment has more than doubled in the past 6 years. New areas are constantly being added to this diversified program to serve as many students as possible. A new aspect of last year's program was on-the-job experience for social technician aides. These students who were trained for positions such as social work assistant and clinical administrative assistant received work experience in community health centers and other health facilities. Other occupational fields in which work experience continued to be provided included: paramedical assistance, day care center assistance, nursing, ornamental horticulture, animal science, and mental health assistance.

Disadvantaged students enrolled in Rochester's diversified cooperative program were provided special assistance by teacher coordinators. These coordinators worked with several community agencies, including Action For a Better Community, Fight Inc., the Ibero-American Action League, and the Urban League in securing employment sites. Providing specially designed job-related instruction; developing training outlines with employers; planning for the recruitment and selection of disadvantaged students; and providing supervision and support on the job were other functions of the coordinators.

Objective

Increase the number of disadvantaged students engaged in work-study programs.

Accomplishment

A total of 2,400 disadvantaged students were enrolled in work-study programs during fiscal year 1975, an increase of approximately 200 over the previous year.

Description

Last year Federal funds were used for the expansion and maintenance of work-study programs in each of the major cities and in the urban areas served by Erie BOCES #1 and Nassau County BOCES. Program structure and employment schedules varied considerably among programs in accordance with student need and local conditions. In the Buffalo program, for example, students from 14 high schools attended regular classes 5 days a week from 8:30 a.m. to 2:00 p.m. and then worked at their jobs until 5:00 p.m. Students are employed in such diverse locations as hospitals, recreation centers, schools, parks, zoos, cultural and civic centers, museums, municipal offices, libraries, police stations, stadiums, and boards of elections. Approximately 250 local agencies cooperate in providing public employment for disadvantaged students.

The Occupational Skills Program at Erie BOCES #1 was a work-oriented program featuring alternate weeks of school-based instruction and public employment. The program, which served an additional 100 students this year, was specially designed for potential dropouts who were significantly behind in reading level and had encountered both academic and social problems in the traditional program. The concentrated work phase of this program was a primary ingredient in its success. Evaluations showed that student attendance improved significantly as a result of participation in the program. Followup reports indicate that 80-85 percent of the graduates were gainfully employed within 3 months of completing the program.

In addition to its school year work-study program, Nassau BOCES operated three Vocational Education Act supported summer programs to provide employment for handicapped and disadvantaged students. In one program, 100 disadvantaged students received 9 weeks of summer employment within the BOCES structure in 29 occupational areas, such as printing, masonry, and baking. Another summer work-study program at Nassau BOCES served 60 health handicapped students who had demonstrated some of the aptitudes necessary for community employment. By observing students closely in actual working situations, BOCES personnel sought to identify those students who had the most potential for public employment and to deal with their specific problems in real work situations. For 4 days a week students were employed in public institutions such as hospitals, libraries, and BOCES facilities. The fifth day was used for group counseling and job information sessions.

In the city of Yonkers 248 disadvantaged students were assigned to jobs in their area of occupational training. The job opportunities included such positions as teacher aide, electrical shop helper, auto shop assistant, clerk typist, nurse aide, library and guidance aide, file clerk, keypunch operator, and assistant teacher aide in the evening schools. School officials have indicated that this program has improved the daily attendance rates of a large number of the participants. For many students, the opportunity for a part-time job served the dual purpose of helping them to remain in school and providing valuable on-the-job experience.

Objective

Additional institutions preparing home economics teachers will explore new approaches to assisting senior students in better understanding the needs of the disadvantaged, and ways of teaching consumer-homemaking education more effectively to this target group.

Accomplishment

A preservice program focusing on methods of teaching consumer-homemaking education to disadvantaged students was conducted at Lehman College of the City University of New York.

Description

Preservice home economics teachers at Lehman College participated in a variety of learning activities which helped them to identify the physical and emotional needs of disadvantaged students. After exploring various needs theories, the students selected eight behavioral characteristics which reflected the unmet needs of the students with whom they were working as student teachers.

The student teachers used the resources of the New York City Health Services Administration, Health Department Center to learn about the health needs and problems of the disadvantaged, especially as related to nutrition. In cooperation with teachers and administrators in their schools they planned workshops for parents and interested community members on meeting the needs of disadvantaged students at home, at school, and in the community. Each student teacher also investigated the family/home environment of one or more students from the teaching center in order to understand the negative effects which may influence a child's behavior and learning in the classroom.

Field trips were made to a New York City day care center for the purpose of learning about the needs of disadvantaged pre-school students. These visits were followed by group discussions and resulted in the development of modules in child development.

After having identified the needs of the disadvantaged, the student teachers worked on determining how they could develop innovative approaches, techniques, and activities for meeting these needs. During this phase of the program the participants conducted panel discussions with a physician and home economist affiliated with the Department of Social Services and with a medical social worker consultant of the Office of Community Services.

SECONDARY

HANDICAPPED

- Goal: Provide opportunities for handicapped secondary students who require special programs or services in order to succeed in occupational education.

Objective

Increase the number of handicapped secondary students enrolled in occupational education.

Accomplishment

A total of 15,916 handicapped students were reported to be enrolled in occupational education in 1974-75 compared to 8,066 reported in 1973-74. Enrollment increased by 969 in the BOCES, by 6,350 in the major cities, and by 531 in the local educational agencies.

Description

New and expanded programs served 4,251 in 1974-75; 25 new programs enrolled 1,832 students and 19 expanded programs served 2,419 handicapped students.

The trend has been in recent years to "mainstream" handicapped students whenever they are physically and mentally capable of succeeding in regular programs. Methods of accomplishing this objective have been varied. In some cases, staff has been added to provide extra counseling or special services to the handicapped student. In other instances occupational education teachers participated in inservice programs to acquaint them with problems of the handicapped. At the Nassau County BOCES a full-time educator of the deaf was employed, and two inservice courses were given to occupational education teachers. Both courses were in sign language, designed around occupational instruction to facilitate communication between teacher and student in regular occupational education programs. Similarly, occupational education teachers from Buffalo City again this year participated in an inservice program in communications conducted at St. Mary's School for the Deaf. In addition, a teacher specialist/interpreter was employed to help students relate to their nonhandicapped peers and instructors.

As a preliminary step to entering regular occupational courses, handicapped students often enrolled in multioccupational or prevocational programs. Many programs of this type were started and expanded during the previous school year. A prevocational program for 45

emotionally disturbed students began at the Allegany BOCES. Students worked in a variety of job situations on the school grounds to become acquainted with a number of occupations while remaining in a familiar setting. Occupational fields included food services, nursing, building maintenance, and office practice. A teacher-counselor for the emotionally handicapped worked along with the occupational instructors to provide counseling support for those students prior to their entrance into a regular program.

A program offered by the Cayuga County BOCES was expanded to serve 99 educable mentally retarded youth. The program was divided into five phases: orientation, providing evaluation and job exploration; training, providing entry level instruction within learning laboratories; cooperative employment; retraining, or entry into a regular occupational education program; and job placement and followup. A resource teacher was added to the staff to assist those students who had progressed to the stage where they were ready to enter regular programs.

The success of a multioccupational program offered by the Dutchess County BOCES proved that properly prepared handicapped students could function well in regular classes. The program, initially in the trade areas, has been expanded to include office education, distributive education, health services, and occupational home economics. The method of instruction continued to be individualized using autotutorial equipment.

Sixty students with varied handicaps participated in a new exploratory program developed by the Nassau County BOCES. Each enrollee spent 2 weeks in each of three areas; oceanographic environments, outdoor lawn and nursery plant care, and large and laboratory animal care. Two teachers experienced in working with special education students plus teacher aides were employed to provide training as well as evaluate student abilities and readiness to enter other occupational education programs. A number of sites were used for instruction and field trips enhanced the student experience. Another program at the Nassau BOCES was exploratory in nature however the handicapped students progressed through units of instruction along with nonhandicapped students. One-half day of counseling was provided to each student and 3 half days were devoted to paid work experiences. During the second phase of the program operating in the current fiscal year, students enrolled in regular courses and still receive counseling and work experiences.

Work experience components of programs for the handicapped proved beneficial in allowing them to adjust gradually to the demand of a real employment situation. A new program conducted cooperatively by the city of Rochester and several local industries provided onsite occupational instruction for 25 physically handicapped students. The extent of student involvement and the program format varied from company to company. At one industry a group of five students were involved in an exploratory on-the-job program. Each week they traveled to a

different company facility and rotated through assembly, screen printing, packaging, and circuit board construction occupations. Following their work experience, students had the opportunity to comment on modifications the industries could make to accommodate physically handicapped workers, such as lower benches and work areas for persons in wheel chairs. In some instances tools and procedures were immediately changed to assist the students in their jobs.

The construction of many new apartment complexes in the Monroe County BOCES #2 area had led to a demand for workers specializing in such skills as sheathing, roofing, and flooring. Realizing that many handicapped students would be able to master these skills, a new program was developed incorporating cooperative employment. As students accomplished identified skills, they moved into regular employment. This program was developed with the cooperation of a special committee of employers and the general advisory council.

A program for handicapped students at the St. Lawrence County BOCES offered courses in maintenance, resort, automotive, and food services. Although students had acquired basic occupational skills, many required a greater transitional period between school and employment. To meet this need, a cooperative program component was begun to provide the related instruction and work experience necessary to insure student success on the job. Placement was available on three levels; regular job situations, semi-sheltered work sites, and sheltered workshops. All students received employability instruction and close supervision was maintained.

A new work experience coordinator was employed by the Cattaraugus BOCES to work completely with handicapped students. The coordinator was responsible for locating appropriate jobs, supervising students on the job, working with instructors to modify occupational programs, and providing employability instruction for the trainees.

There were many different types of supportive services, as mentioned previously, which helped handicapped students to adjust to the school setting and eventually a work situation. The following examples represent some of the special efforts that were made to assure employment for the handicapped. Two field job analysis specialists were employed by the Nassau County BOCES to identify jobs in the public sector which could be filled by handicapped persons. One survey showed more than 200 such positions in private industry. Preliminary discussions with employers in the public sector indicated many job opportunities there also. The specialist met with potential employers, reviewed job classifications with respect to the abilities of the handicapped, restructured job descriptions to accommodate handicapped persons, and made recommendations for changes in occupational training based upon job requirements. Also at the Nassau County BOCES an educational psychologist was employed to assist students and instructors in improving student learning behavior; and facilitators served as liaison with county-based

agencies who refer handicapped students to BOCES, and solicited business and industrial support. A remedial reading program for mentally retarded students enrolled in work experience programs was initiated by the Genesee, Wyoming BOCES. Employers had indicated that reading problems often limited job opportunities of handicapped students. A reading specialist conducted diagnostic evaluations, provided individualized reading and instruction, and evaluated student progress. A followup study to assess student success on the job is being conducted.

New programs were created this past year to serve students with multiple handicaps. The city of New York for the first time developed one occupational education program for students with more than one handicap. The ultimate goal was to place students in semi-competitive work or in a sheltered workshop program. The areas in which training was provided were printing and publication, product production, and packaging. Activities were developed for individual instruction in graduated steps. Students with multiple handicaps participated in a four phased occupational education program in Rochester. The program allowed each student to individually become aware of personal, educational, and occupational interests as well as their own limitations and possible job restrictions. After intensive counseling and testing, students explored and experimented in a multioccupational laboratory. Students gradually narrowed down their program choices and concentrated on a single area for extensive study and work experience. The final phase of the program was job placement and followup.

Each year several area centers have reported that facilities were modified or equipment purchased for physically handicapped students. Rochester, for example, provided lower table tops and non-skid floors in their photography department for handicapped students in wheel chairs. Other centers reported similar changes such as the installation of ramps in the buildings offering occupational instruction.

Efforts were continued during 1975 to develop a demonstration delivery system of occupational education for the handicapped in selected State-supported schools for the handicapped. Three programs were developed and two were expanded. Each of the programs conducted was a joint effort between a State-supported school for the deaf or blind and a BOCES or city school. The handicapped students residing in the State-supported school received academic instruction in the school for a half day and were then transported to an occupational facility at the cooperating BOCES or city school where they received occupational training in classes with nonhandicapped students. Supporting staff were employed to facilitate the adjustment of the students and to coordinate various aspects of the programs.

The city of Buffalo offered a new occupational program at McKinley High School to students who attend St. Mary's School for the Deaf. These students attended regular graphic arts classes on a half-day basis. Teacher specialist-interpreters provided assistance to the students and acted as liaisons between the staffs of the two schools.

Nassau County BOCES provided a half-day of occupational training to deaf students from the Mill Neck Manor School for the Deaf and other local schools. The students received the necessary academic instruction at their home schools. During their two and one-half hours at the BOCES center, first year students participated in a multioccupational exploratory program. Second year students had the opportunity to enter one of 42 regular occupational programs at the BOCES. An instructor of the deaf served as a communication facilitator for the handicapped students. To further ensure the adaptation of the students to the integrated classroom, occupational instructors participated in an in-service program which familiarized them with sign language.

A new program in Genesee, Wyoming BOCES enabled students from the New York State School for the Blind to participate in selected occupational classes at the BOCES. A full-time coordinator worked with the staffs of both schools in screening potential enrollees, coordinating schedules, organizing a work experience program, and providing mobility instruction. Other supportive services which facilitated the adjustment of the students to their training and work situations were special instructional aids, individual guidance, and transportation to school and jobs.

Funds were provided for the continuation of the Monroe BOCES #1 Foreman Center occupational program serving students enrolled in the Rochester School for the Deaf. The deaf students transported to the center, received a half-day of instruction in regular occupational classes supplemented by periodic field trips, counseling sessions, and related programs conducted by the project coordinator. The coordinator was also responsible for maintaining an inservice training program for teachers, integrating the curricula of the two schools, conducting placement and followup activities for the program's graduates, and evaluating the results of the program.

Continued funding was also provided for a cooperative program in which students from the New York State School for the Deaf enrolled in regular occupational education courses at the Oneida BOCES #1. Students were prepared for entry level jobs in a number of fields including building construction, floral design, auto body, and commercial art. An occupational education coordinator for the hearing handicapped assisted students and instructors with language problems, helped to coordinate the academic program of the NYSSD with the occupational program of the BOCES, provided inservice training, and developed career orientation and work experience programs for the students.

POSTSECONDARY

GENERAL

- Goal: Diversify and expand program offerings to serve increasing numbers who need and desire occupational education at the postsecondary level.

Objective

The total number of full-time degree and nondegree students in occupational education at public 2-year colleges will increase.

Accomplishment

Full-time enrollment in degree and nondegree occupational education programs at public 2-year colleges increased from 74,197 in 1973-74 to 83,071 in 1974-75. Beginning with the 1976 State Plan, postsecondary occupational education has been redefined to include all degree students, full-time and part-time. All nondegree students are now classified as adults. According to the new definitions, there were 138,855 postsecondary occupational education students in 1974-75, including 59,720 part-time degree students.

Description

During 1974-75, occupational education projects supported wholly or in part under the postsecondary VEA setaside provided new, improved, and expanded instructional opportunities to over 26,000 full and part-time students enrolled in both degree and nondegree occupational programs in the State's 44 public 2-year colleges and 10 educational opportunity centers. Special emphasis was placed during the year on continued development and implementation of effective instructional media and materials; the refinement of techniques of guidance, occupational counseling, and job placement; and the upgrading of occupational instructors for the improvement of classroom teaching, particularly with respect to better serving the instructional needs of students admitted to programs as a result of open admissions and full opportunity policies. Efforts were also continued during the year to further expand developmental skills programs where such activities were needed to enable students to cope adequately with the academic requirements of postsecondary level occupational training. Toward the latter phase of the funding cycle, emphasis began to be placed on funding of programs designed to train the unemployed in response to the changed economic situation. This priority is in full force during the present fiscal year and will be described more fully in the fiscal 1976 report.

New and Expanded Postsecondary
Programs and Enrollments
Fiscal Year 1975

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
AGRICULTURE				
Conservation		1		45
Total Agriculture		1		45
DISTRIBUTIVE EDUCATION				
Apparel and Accessories		1		400
Food Distribution		1		120
Total Distribution		2		520
HEALTH				
Dental Hygiene		1		31
Medical Laboratory	1	5	30	315
Nursing, Associate Degree		5		965
Medical Therapy Assisting	1	1	20	60
Radiological Technology		1		33
Health Related Technology		2		70
Other Health		2		192
Total Health	2	17	50	1,666
HOME ECONOMICS (OCCUPATIONAL)				
Care and Guidance of Children	1	4	100	344
Total Home Economics	1	4	100	344
BUSINESS AND OFFICE EDUCATION				
Bookkeeping and Accounting		3		880
Data Processing		6		1,596
General Office, Clerical and Typewriting	3	3	525	1,450
Stenographic, Secretarial and Related Occupations		8		1,157
Supervisory and Administrative Management	3	5	138	884
Other Office	1	1	30	1,000
Total Business and Office	7	26	693	6,967
TECHNICAL EDUCATION				
Pre-Vocational Curriculums		3		2,271
Automotive Technology	1	2	24	285
Civil Technology		3		205
Electrical Technology		5		366

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
TECHNICAL EDUCATION (contd.)				
Electronic Technology		1		75
Electro-Mechanical		3		341
Environmental Control		2		104
Industrial Technology		1		300
Instrumentation Technology		2		145
Mechanical Technology		3		530
Social and Educational Technology	1		25	
Total Technical	2	25	49	4,622
TRADE, INDUSTRIAL AND SERVICE OCCUPATIONS				
Pre-Vocational Curriculums		2		145
Air Conditioning, Refrigeration and Heating	1	3	25	64
Automotive Service	1	1	20	215
Photography Occupations		1		80
Construction and Maintenance Trades	1	3	40	200
Drafting	1		40	
Electronics	2	2	20	132
Machine and Metal Industries	2	2	140	100
Law Enforcement Training		1		60
Public Service Occupations		2		439
Quantity Food Occupations		2		440
Textile Production and Fabrication		2		60
Other Trade, Industrial, and Service	2		140	
Total Trade, Industrial, and Service	10	21	425	1,935
TOTALS	22	96	1,317	16,099

With statewide institutional needs now shifted toward program refinement and increased capacity for equal access to occupational programs, fewer new curriculums were started for which VEA support was requested. A total of 22 new curriculums were implemented, of which six lead to an associate in applied science degree upon completion, and sixteen offer certificates upon completion of courses of study ranging from 6 weeks to 1 year. New degree curriculums were initiated in medical laboratory technology, medical therapy assisting, paralegal assisting, automotive technology, social and educational technology, and machine and metal industries (jewelry design). New certificate programs were offered in care and guidance of children, general office (3), supervisory and administrative management (3), air conditioning, refrigeration and heating, automotive services (2), construction and maintenance trades, drafting, electronics, machine and metal industries, customer service representative, and vending machine service and repair.

During fiscal year 1975, 96 existing programs were expanded, modified, or improved, leading to enhanced occupational education opportunities for over 16,000 students. Of these programs, 69 lead to the associate degree and the remaining 27 to a certificate or diploma.

Degree program expansion occurred in the areas of conservation, apparel and accessories, food distribution, dental hygiene, medical laboratory technology (5), associate degree nursing (5), medical therapy assisting, radiologic technology, child care, accounting, data processing, secretarial, laboratory technician, automotive technology, civil technology, electrical technology, electronic technology, electromechanical technology, audiovisual technology, construction, quantity foods occupations, and law enforcement training.

Certificate programs expanded include optometric assistant, child care, general office--clerical and typewriting, secretarial, supervisory and administrative management, biomedical equipment technician, electromechanical, industrial technology, pre-apprenticeship, refrigeration and air conditioning, automotive services, photographic (automated camera platemaker), construction and maintenance trades, electronics, textile production and fabrication, educational aide, sheet metal fabrication, machine tool technology.

A 1-year certificate program in automotive mechanics at Canton Agricultural and Technical College represented one of the relatively fewer new curriculums initiated during the year, reflecting as the others do both a need for trained manpower and the desire for short-term skills training on the part of recent secondary school graduates. The majority of the 18 students initially enrolled came directly from high school and had no previous training in the automotive field.

Several had previous BOCES training, but enrolled to seek more advanced courses, while a few enrollees possessed work experience directly related to this program but lacked formal coursework. The second or current year enrollment is 20 students. Job placement services are provided graduates, and inquiries from potential employers indicate that sufficient placement opportunities will exist to enable each graduate to obtain employment.

At Nassau Community College, increases in enrollment combined with the need to keep pace with technological changes in hospital settings required the addition to the college's nursing program of five complete hospital units. The units consisted of electric hi-low beds with safety rails, overbed tables, bedside cabinets and chairs, electronic resuscitation units, aquathermia hot and cold units, a circo-electric bed, and other equipment. The addition of this equipment enabled students to improve their clinical skills, while permitting them to increase their opportunities for independent study. Employer feedback indicates recent graduates of this nursing program are better prepared than in the past for their initial hospital assignments.

Articulation between secondary and postsecondary occupational education programs has been supported through postsecondary VEA setaside funds since fiscal year 1970. During 1974-75, programmatic and resource articulation efforts took place at Fulton-Montgomery Community College, Rockland Community College, Dutchess Community College, Corning Community College, Queensborough Community College, and Monroe Community College. Articulation efforts at Fulton-Montgomery Community College involve the extension of campus facilities utilizing BOCES shop and laboratory to supplement instruction in data processing, natural resources conservation, automotive technology, food service, audiovisual technology, and construction technology.

Queensborough and Monroe Community Colleges are institutional components of a coordinated effort on the part of the City University Institute for Research and Development in Occupational Education to develop a systematic procedure for developing articulated curriculums between postsecondary institutions and their feeder schools. Articulated curriculums under development are accounting and data processing at Queensborough, and engineering technologies at Monroe. Dutchess Community College instituted efforts during the year to articulate its occupational guidance and counseling with area secondary schools. Rockland Community College's articulation of its new electrical technology program has taken the form of assessing community resources which will enable the college to utilize existing business and industry facilities as extensions of campus laboratory facilities in which to conduct training in the specialized courses. Corning Community College has undertaken to develop cooperative arrangements among business, industry, education, and government agencies that will improve and coordinate the delivery of occupational education in the area

served by the college. A joint planning effort was begun involving New York City Community College, George Westinghouse, and Grady Vocational High Schools. This is designed to develop articulated programs enabling secondary students to enter the college's technical programs with advanced standing or in some instances to facilitate their entry and maximize chances for successful completion of their postsecondary program.

Work continued during 1974-75 on designing and implementing new curriculum planning procedures for postsecondary occupational education. Program Planning in Two-Year Colleges: A Handbook, prepared under the direction of the Cornell Institute for Research and Development in Occupational Education, provides a practical yet systematic process for deciding whether or not to undertake a new program. This publication represents the culmination of 2 years of research. The first year of the project was devoted to the development of the system and resulted in the publication of a preliminary version, A Decision System for Occupational Programs in Community Colleges. The second year was directed to evaluating, revising, refining, and disseminating the system. During this phase the project was disseminated to educators at 16 two-year colleges through oncampus and regional workshops in New York State.

The system was also field tested at three community colleges--Corning, Genesee, and Monroe. The different ways in which the system was used at these colleges illustrates the versatility of the system. At Corning the system was used by a program development analyst to determine the feasibility of establishing a dental hygiene program at the college. At Genesee the system was used by an ad hoc curriculum committee to develop standardized criteria for program review. At Monroe the Dean of Curriculum and two faculty members utilized the system in different ways in the development of two different programs: to narrow the parameters of one program; and to guide the field research in planning another program.

Program Planning in Two-Year Colleges: A Handbook is designed for general applicability but is written within the context of the SUNY system. The handbook divides the decision process into two major phases: first an Estimation Phase for deciding whether a program is worth considering in detail, and second a Precision Phase for deciding whether or not to implement the program. Each phase provides for examining: what will be included in the program of studies, how the program relates to the long range planning of the college program, what resources would be necessary to fund the program, the projected student enrollment in the program, the employment opportunities in the field, local support for the program, and how the program would be evaluated. The authors have concluded the handbook with a simulated program planning exercise to provide inexperienced planners with an example of how the planning process actually works. Copies of Program Planning in Two-Year Colleges: A Handbook are being distributed to all 2-year colleges in New York State.

A number of studies were underway during 1974-75 which have bearing on the reduction of sex-stereotyping in enrollment in occupational education at 2-year public colleges. These studies are also described in the MULTILEVEL section under research. The Institute for Research and Development in Occupational Education at Cornell continued a study of "Women in Two-Year Colleges." The Institute for Research and Development in Occupational Education at City University of New York assisted the Cornell Institute in collecting data from a representative sample of 2-year colleges in the CUNY system, in addition to working on four studies entitled: "New Occupational Student: Mature Adult Woman," "The Reduction of Stereotype Responses for Women on Career and College Major Scales of the Kuder Occupational Interest Survey," "Expressed Interest and Satisfaction with Inventoried Occupational Choices for Women Returning to Educational Training," and "Occupational Interests of Re-Entry Women with Traditional and Non-Traditional Sex Role Attitudes." The Cornell study, "Women in Two-Year Colleges" is examining characteristics and perceptions of 2-year college students related to factors that influence their educational and career decisions. The project will culminate in publication of the research findings together with an analysis of implications for program planning, counseling, and placement that relate to women in the 2-year colleges.

Dutchess Community College continued to provide special counseling services aimed at eliminating sex-stereotyping in occupational education programs. This project is described under the guidance and counseling objective in this section.

Objective

Increasing numbers of 2-year public college students in a wide range of occupational programs will engage in work experiences coordinated with their academic experience.

Accomplishment

The number of 2-year public college students engaged in cooperative education programs increased from 3,994 in 1973-74 to 4,854 in 1974-75.

Description

In 1974-75 cooperative education programs combining work experiences with classroom instruction were implemented at Clinton Community College and Orange County Community College. The program at Clinton will include students enrolled in all occupational curriculums, while Orange County Community College implemented cooperative education in its accounting, secretarial, and data processing curriculums. Alfred Agricultural and Technical College obtained VEA funding support to expand its cooperative education program to include agriculture, technical,

vocational health, and business curriculums, coordinated by a director of cooperative education who will assist in the expansion of cooperative education on a college-wide basis. Support for the second stage development of cooperative education was provided Genesee and Schenectady Community Colleges and Villa Maria College of Buffalo, the latter an independent 2-year institution serving students enrolled in business and public services programs. An additional 1,106 students benefited from the support provided during the year under VEA.

Objective

The number of students attending private trade and business schools will increase.

Accomplishment

The number of students attending private trade schools increased from 86,288 in 1972-73 to 102,286 in 1973-74, the latest year for which data are available. The increase reflects licensing and registration of additional schools under the new and strengthened regulations developed to carry out the provisions of sections 5001, 5002, 5003, and 5004 of the Education Law, enacted by the Legislature in 1972.

The most recent enrollment reported in private business schools was 15,200, in 1971-72. Because of a transfer of administrative responsibilities for these schools, new data will not be available until the conclusion of the current fiscal year.

- Goal: Increase the number of students who begin and successfully complete postsecondary occupational education programs.

Objective

The number of students successfully completing degree and nondegree programs in occupational education at public 2-year colleges will increase.

Accomplishment

The number of students successfully completing degree programs in occupational education increased from 16,019 in 1973-74 to 19,640 in 1974-75. The number of students successfully completing nondegree programs at 2-year public colleges decreased from 1,148 in 1973-74 to 1,063 in 1974-75.

Description

In recent years a variety of measures have been supported to increase the number and percentage of occupational education students who successfully complete their programs at 2-year public colleges and educational opportunity centers. These have included: improvement and expansion of occupational guidance and counseling services; increased utilization of developmental skills programs in reading and mathematics; and greater emphasis within inservice education on personal and interpersonal relationships, humanistic education, guidance and counseling, achievement motivation, and innovative instructional techniques and technologies.

An increasingly important aspect of occupational program improvement in the past 2 years has been the development and greater utilization of instructional materials and a corresponding increase in the use of instructional technology. As applied to postsecondary occupational programs, this new technology has resulted in more reliance on audiovisual materials and technology to individualize instruction, to provide opportunities for more students to engage in self-paced instruction, and to enable occupational instructors to more effectively prescribe complete or partial lesson segments to meet a diversity of needs. Some representative projects utilizing VEA funding to develop and use audiovisual instructional materials include the development of self-paced materials for instruction in electrical technology and self-paced and group instruction for health technology students utilizing the Student Response System at Hudson Valley Community College, and the acquisition of modularized audiovisual instructional materials in accounting now in use at LaGuardia, Hudson Valley, and Dutchess Community Colleges. Computer assisted occupational program instruction was also implemented at Alfred Agricultural and Technical College, Nassau, New York City, and Columbia-Greene Community Colleges. At Hostos Community College specialized equipment was obtained which would aid handicapped students in receiving instruction. Equipment included a closed circuit TV reading machine, a braille typewriter and cassette tape recorders. Special educational materials were developed at Kingsborough Community College to provide Spanish or bilingual instruction to supplement courses in nursing and educational assistant programs.

- Goal: Strengthen the preparation of occupational education teaching staffs at 2-year public colleges.

Objective

Additional postsecondary occupational education teachers will be engaged in inservice education programs.

Accomplishment

Inservice education projects conducted during fiscal year 1975 served 744 two-year college faculty and staff members, compared with 369 in fiscal year 1974.

Description

Staff development projects, including summer inservice institutes, workshops, seminars, and colloquia involved 2-year college faculty, staff members, and student personnel workers in a variety of subjects designed to upgrade the skills and competencies of occupational educators at the 2-year college level. A 2-year college dental hygiene instructor workshop was conducted at Hudson Valley for the purpose of updating these instructors and to improve their clinical competencies to conform to standards established by the Council on Dental Hygiene of the American Dental Association. Cornell's Institute for Research and Development in Occupational Education served as trainers in two series of workshops dealing with the systematic process for occupational education curriculum development and an inservice training program strategy for improvement of local evaluation of 2-year college occupational programs and projects. Both of these Cornell program activities resulted ultimately in the development of documents which can serve to aid 2-year colleges in program development and evaluation. The City University Research and Development Center coordinated two statewide conferences which were held to implement strategies and to continue to develop methods for recruiting, improving instruction, and providing job placement services for 2-year college handicapped occupational students.

The State University at Albany Two-Year College Development Center undertook through means of VEA support a series of three statewide workshops, a regionally-focused program, and five single-day local faculty workshops, involving as participants representatives from 2-year public and independent colleges as well as the educational opportunity centers. The statewide workshops dealt with the topics: "Linkage: College-Community Cooperative Efforts to Improve Vocational Counseling;" "Evaluation: Using Impact Analysis for Occupational Counseling Gain and Program Improvement," and "New Needs--New Ways: Designing Assessment Programs for Occupational Decision Making." The regionally-focused program for occupational faculty, counselors, and administrators of five colleges was conducted to strengthen their developmental studies programs as these are utilized in affecting the academic success and the career preparation and placement of occupational students. The single-day workshops developed further the topics presented at the statewide and regional workshops, with concentration on local faculty at five separate institutions.

Clarkson College and Rochester Institute of Technology conducted summer inservice training programs for 2-year college engineering technology instructors, focusing on upgrading technical competencies, with special emphasis on mathematics, engineering science, computer applications in engineering technology, and on the improvement of teaching skills appropriate to community college students.

Realizing the need for local administrators' input into decisions which bear on their responsibilities, the Bureau of Two-Year College Programs worked jointly with the Bureau of Inservice Education in conducting a colloquium involving key administrators from selected 2-year colleges and educational opportunity centers in the determination of staff development training needs which will be undertaken in the next few years under VEA.

- Goal: Provide adequate guidance, counseling, placement, and followup services for all postsecondary occupational education students.

Accomplishment

During 1974-75, more than 1,600 students at 2-year colleges were directly served by guidance and counseling projects receiving VEA funding during the year.

Description

Occupational guidance, counseling, and job placement services were improved and extended to include larger numbers of 2-year college occupational students, returning veterans, and high school seniors, as well as disadvantaged youth and adults. Job placement services were instituted at Broome, Herkimer, and Westchester Community Colleges, while improvement and expansion of these services were undertaken at Farmingdale Agricultural and Technical College, Fashion Institute of Technology, Borough of Manhattan, and Bronx Community Colleges. The placement counselor at Farmingdale was assigned duties in placing handicapped graduates and in establishing broader contacts to facilitate future placements for these occupational students. The program funded at Bronx Community College is designed to assist disadvantaged adults in obtaining employment and is offered in conjunction with its continuing education program.

Guidance and counseling efforts directed toward correctional inmates to assist them in meeting their occupational needs were implemented at New York City, Hostos, and Clinton Community Colleges. The program funded at Hostos provides occupational guidance as a supplement to the college's work-release program, funded and offered jointly by the City and State Correctional Services agencies. Both New York City Community College and Clinton Community College offer outreach counseling services, the former at the Brooklyn House of Detention and the

latter at Clinton Correctional Facility. The New York City program has this year received basic support to continue its counseling program on behalf of inmates through the New York City Criminal Justice Coordinating Council.

Occupational guidance and counseling activities for disadvantaged were conducted also at Borough of Manhattan Community College's Educational Opportunity Center and at the Community College of the Finger Lakes. The EOC program employs the group approach and through a series of meetings provides current and potential students information on training and employment opportunities in technical fields. Finger Lakes employed a minority member counselor in an outreach capacity to counsel disadvantaged and migrant workers on occupational training programs offered at the community college.

Counseling, guidance, and other assistance were provided handicapped students at Bronx, Dutchess, LaGuardia, and Queensborough Community Colleges. Special counseling services were provided to over 100 disabled students, including such services as mobility training, counseling, career information, and job placement.

Other special projects included occupational and career education counseling for adult women coordinated through the City University Research and Development Center and conducted at the Bronx and Kingsborough Community Colleges campuses. Over 320 adult women participated in the workshops, many of whom subsequently enrolled in occupational courses on these campuses. Dutchess Community College engaged in outreach counseling which was directed toward altering preconceived sex stereotyping as this related to employment in specific occupations. The goal of this effort is to increase enrollments in curriculums based on student interests and employment opportunities, irrespective of any predominance by either sex. Thus, for example, women are encouraged to seek employment in male dominated technical programs while males might select without artificial restraint courses designed to train health paraprofessionals.

The City University Research and Development Center was also engaged in a project to provide computerized vocational information on a pilot basis, involving four City University Community Colleges. The project is similar in nature to a CIVIS program which the R and D Center is engaged in on behalf of secondary schools located in New York City.

Additional occupational guidance, counseling, and vocational testing projects were undertaken at Adirondack, New York City, Kingsborough, and Cayuga Community Colleges during fiscal year 1975.

POSTSECONDARY

DISADVANTAGED

- Goal: Serve educationally and financially disadvantaged students who need and desire postsecondary occupational education.

Objective

The number of disadvantaged students enrolled in degree and nondegree postsecondary occupational education programs will increase.

Accomplishment

Because of the failure of most New York City community colleges to report numbers of disadvantaged students in occupational education, the total reported number of disadvantaged postsecondary occupational education students decreased from 5,503 in 1973-74 to 2,464 in 1974-75.

Description

Instructional programs for disadvantaged students implemented or expanded during the year were child development associate (a new program for Head Start Mothers), secretarial (2), biomedical equipment technician training, pre-apprenticeship, air conditioning, offset duplicating, automotive mechanics, television service and repair, basic electronics, machine tool technology, vending machine mechanic, and customer service representative. A total of 869 disadvantaged students received instruction in these programs and were assisted in obtaining subsequent employment.

Major emphasis in new projects serving disadvantaged students during 1974-75 was on the developmental skills programs described under the following objective.

Objective

The number of disadvantaged students successfully completing degree and nondegree occupational education programs will increase.

Accomplishment

Because of the failure of most 2-year public colleges in New York City to report numbers of disadvantaged students in occupational education, the number of disadvantaged students reported as completing postsecondary occupational education declined from 779 in 1973-74 to 305 in 1974-75.

Description

Developmental skills instruction programs supplementary to regular program offerings were implemented or expanded at eight campuses. These programs, offered primarily to counter problems faced by educationally disadvantaged 2-year college students, were offered at Dutchess, Erie, Jefferson, North Country, Sullivan County, Corning, New York City, and Queensborough Community Colleges.

Comprehensive programs of compensatory or developmental skills training for reading, computational, and study skills were provided by North Country, Dutchess, and Jefferson Community Colleges, and were made available to all occupational students. Limited programs, designed for engineering technology students at New York City, and business and secretarial science students in need of remedial instruction at Sullivan County Community College, were geared to specific curriculum content areas. Remedial instruction provided by Corning was designed to serve students enrolled in its apprenticeship program offered through arrangements with Corning Glass Works who were deficient in mathematics and computational skills. Special remedial instructional materials in mathematics were developed by Erie Community College, while Queensborough Community College developed specialized writing materials to assist its educationally disadvantaged occupational students.

POSTSECONDARY

HANDICAPPED

- Goal: Provide opportunities for handicapped postsecondary students who require special services or programs in order to succeed in occupational education.

Objective

The number of handicapped students served in full-time associate degree programs at 2-year public colleges will increase.

Accomplishment

The number of handicapped students reported enrolled in postsecondary occupational education programs decreased from 590 in 1973-74 to 489 in 1974-75, as a result of the failure of most New York City 2-year public colleges to report special needs enrollments.

Description

Programs of instruction for handicapped were funded at Genesee Community College (Civil Service Preparation for Visually Handicapped), LaGuardia Community College (Typewriting and Keypunching Skills), and Staten Island Community College (Business and Data Processing). Enrollments of handicapped students in these programs totaled 475.

One example of a postsecondary program designed for handicapped occupational students is the Job Placement Services program at Farmingdale Agricultural and Technical College. Through special efforts to serve the college's 40 handicapped occupational graduates, 35 were placed successfully in jobs such as cooking, clerical, maintenance, security, electronics, laboratory technician, and recreation supervision. The staff services made possible through VEA funding resulted in extensive employer contacts for the purpose of securing job commitments, and a program of followup visits to employers to discuss progress of the handicapped employee or to determine whether problems existed.

ADULT

GENERAL

- Goal: Serve adults who seek training or retraining for employability, advancement, job security, or mobility.

Objective

Increase the number of adults served by occupational education programs.

Accomplishment

Adult occupational enrollments were reclassified during the past year to include persons enrolled in full-time nondegree occupational programs at public 2-year colleges and to delete persons enrolled in part-time degree programs at public 2-year colleges. According to this revised classification, 131,148 persons were served in adult occupational programs during the 1974-75 school year. Of this total, 38,556 adults were enrolled in the BOCES centers, 56,384 in the major cities, 19,382 in the other local public secondary schools, 9,100 in the public 2-year colleges, and 7,726 in the educational opportunity centers. Under the previous classification the number of persons enrolled in adult occupational education programs during the 1974-75 school year totaled 186,932, a growth rate in excess of 10 percent.

Description

In secondary agencies, 90 new programs served 2,547 adults and 124 expanded programs enrolled an additional 3,343 adults. Additionally, the public 2-year colleges served 3,572 adults through five new and 17 expanded programs.

During fiscal year 1975, VEA assistance was made use of to introduce, modify, and expand many occupational educational programs to assure that educational and/or training opportunities remained consistent with the needs of business, industry, and labor. Brief descriptions of representative examples of programs developed throughout the State in response to area manpower needs follow. The Schuyler, Chemung, Tioga BOCES initiated a dental assisting program for adults at the request of the local dental association for the purpose of alleviating an area shortage of at least 50 dental assistants. This program provided classroom instruction followed by onsite training in local dentists' offices. The Washington, Warren BOCES learned that local business and industry concerns were experiencing difficulty in recruiting operators for newly installed office equipment such as varitypers and flexi-writers, so they expanded their business machines program, with the aid of VEA funds, to provide the appropriate training necessary to qualify persons for those particular occupations. The

New and Expanded Adult Programs and Enrollment
in Secondary Agencies
Fiscal Year 1975

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
AGRICULTURE				
Agriculture Production		1		24
Ornamental Horticulture	7	1	135	40
Total Agriculture	7	2	135	64
DISTRIBUTION				
General Merchandising, General Sales, or Sales Supporting	2		46	
Real Estate	3		120	
Recreation and Tourism	1		15	
Transportation and Service	2		69	
Total Distribution	8		250	
HEALTH OCCUPATIONS				
Dental Assisting		1		36
Nursing, Licensed Practical	2	2	32	92
Medical Emergency Assisting	2	1	94	129
Other Health	2		55	
Total Health	6	4	181	257
HOME ECONOMICS				
Home Furnishings, Equipment and Services	2		21	
Total Home Economics	2		21	
BUSINESS AND OFFICE				
Bookkeeping and Accounting	1	4	16	65
Data Processing	5	5	121	187
General Office--Clerical and Typewriting	4	9	79	274
Stenographic, Secretarial, and Related Occupations		3		247
Total Business and Office	10	21	216	773
TECHNICAL				
Architectural Technology	1		8	
Civil Technology	2		40	
Electronic Technology	3		36	
Total Technical	6		84	

PROGRAMS	Number of Programs		Enrollments	
	New	Expanded	New	Expanded
TRADE, INDUSTRIAL, AND SERVICE				
Air Conditioning, Refrigeration, and Heating	6	1	157	90
Appliance Repair	1		9	
Automotive Service		15		437
Aviation Operations	5		58	
Commercial Arts Occupations	2		62	
Photography Occupations	2		113	
Construction and Maintenance Trades	7	9	189	548
Custodial Services	1	20	1	20
Drafting	3	2	42	23
Electrical Occupations	4	6	168	297
Electronics	4	4	90	97
Graphic Arts	2		23	
Maritime Occupations	1		2	
Machine and Metal Industries	2	14	39	449
Personal Services	1	18	1	13
Public Services Occupations, other	4		238	
Quantity Food Occupation	3	5	43	141
Textile Production and Fabrication	1	1	25	40
Other Trade, Industrial, and Service	2	2	400	94
Total Trade, Industrial, and Service	51	97	1,660	2,249
TOTAL ALL PROGRAMS	90	124	2,547	3,343

same BOCES also responded to a request by 14 local real estate agencies to provide a course that would enable individuals presently employed in those agencies to be upgraded to brokers. Elsewhere, a new 60-hour indepth instructional program covering both the English and metric systems of weights and measures was conducted by the Allegany BOCES in response to requests from area employers who indicated an unmet demand for employees conversant with both systems. The St. Lawrence, Lewis BOCES conducted a pilot project involving industrial-sponsored courses in machine trades and electrical controls. The success of this pilot project was evidenced by the concerned industries' willingness to reimburse their employees for all incurred expenses upon their successful completion of either course.

Representatives of local industry in the New York City region, indicated they were experiencing considerable difficulty hiring qualified personnel trained in the new techniques of the machine shop industry. The New York City public schools provided updated machine shop programs, encompassing such areas as numeric control and an avionic machine shop for the purpose of alleviating this apparent structural imbalance. Staten Island Community College, in cooperation with Consolidated Edison, offered a new certificate program in industrial management for the purpose of upgrading the technical skills of 300 company employees. This program utilized company industrial sites to train students in the techniques of application along with conventional classroom and laboratory instruction in theory.

Similarly, new programs were developed and implemented by the city of Buffalo to meet the varied skill requirements of its mix of industries. For example, over 250 employees of two newspapers in Buffalo received training in new production methods peculiar to the printing industry due to the acquisition of new equipment which has updated the City's facilities. Other local industries, including automobile manufacturers, requested and received specific training through the Buffalo adult program for the dual purposes of upgrading the skills of their employees and/or relieving apparent occupational supply/demand imbalances.

Certain new programs were introduced during fiscal year 1975 to provide adults with occupational training in new and emerging occupations. Since the computer, electronics, and electrical machinery industries are expected to undergo rapid growth during the seventies, many new occupational programs were implemented during the past year to train adults for prospective employment opportunities in these technical fields. The Cattaraugus, Erie, Wyoming BOCES, for example, introduced a program in computer operation and programming using new equipment obtained this year with VEA funds. Elsewhere, Dutchess BOCES instituted a new adult program in data processing and advanced computer operation. The Mid-Westchester BOCES established a seven course cluster designed to develop skill competencies in the field of electronics. Cayuga BOCES introduced a program in cable-television

technology to qualify adults for entry-level employment as cable-television installers and technicians. Major topics covered by the program were power suppliers, trunk amplifiers, troubleshooting, and safety.

A pilot program designed to introduce business and office students to the use of word processing equipment was implemented at Yonkers High School. The program utilized the school's word processing equipment and the instruction reflected the changed emphasis placed on various aspects of secretarial training by this new form of office organization. Similar programs were conducted at the Nassau, Onondaga, and Erie BOCES.

One of the key characteristics of the post-industrial economy is the growing importance of education and education-related activities. New instructional techniques, including team teaching and a variety of teaching aids and devices, have made it feasible and desirable to utilize teaching assistants in increasing numbers. Consequently, training programs for educational paraprofessionals have been increased and/or expanded. Schenectady Community College, for example, expanded its educational paraprofessional training program enrollment to more than 400 adults. Local school district personnel received training which qualified them for certification for continued employment or for advancement. Bronx Community College developed and implemented a special education program to train educational paraprofessionals to work with handicapped students in elementary and high school.

Rising costs and a shortage of qualified personnel in various health services fields have induced changes in job specifications which have hastened the growth of new job opportunities, especially paraprofessional jobs, in recent years. Accordingly, VEA assistance was used to introduce, modify, and expand many programs in health occupations education so that graduates can be reasonably assured of employment while the bottleneck for skilled technicians in the health fields is simultaneously lessened. Nassau BOCES, for example, introduced programs to train adults for positions as medical office assistants, medical office technicians, and home health assistants. Elsewhere, both Albany, Schenectady, Schoharie BOCES and Lewis County Area Occupational Center developed and implemented training programs in conjunction with their respective County Health Departments, to prepare adults to be emergency medical technicians. The Albany, Schenectady, Schoharie BOCES also introduced a pharmacology program to provide supplementary training to adults already employed as either licensed practical or registered nurses. Students became acquainted with various techniques of preparing and measuring drugs, the effects of drugs on various systems in the body, and regulations associated with prescribing and dispensing drugs.

Because of the high level of unemployment in the construction industry, some labor union officials have restricted the number of apprentices they were willing to take on from a year ago. Consequently, some educational institutions have been compelled to contract or suspend

existing apprentice training programs. Tompkins, Seneca, Tioga BOCES, for example, discontinued apprentice training for carpenters and bricklayers. Likewise, Orleans, Niagara BOCES discontinued training programs for carpenter's apprentices. On the other hand, apprentice training programs at the St. Lawrence, Lewis BOCES continued related classroom instruction at the request of Massena based industries even though many of the apprentices have been laid off as a consequence of the recession. Attendance remained high and students were requesting additional work in the shop to keep their hands-on skills in shape. There were, however, areas of the State where the demand for new programs providing related instruction for apprentices continued strong and educational agencies in those areas continued to develop new apprenticeship training programs in cooperation with officials of local labor unions. The Cattaraugus, Erie, Wyoming BOCES, for example, implemented a program designed to train grade foreman apprentices in the use of the laser beam. This innovative program was developed upon the recommendation of the Southern Tier Construction Trade Locals. Elsewhere, Nassau BOCES conducted new apprentice training programs in conjunction with both the Plumbers and Painters Union and the Tool and Diemakers Association. A new building trades programs for plumbers and apprentices was also implemented in the New York City evening trade schools. All participants in the latter program were from minority groups, received on-the-job training and attended classes two evenings per week for related instruction. Corning Community College, in cooperation with Corning Glass, provided instruction in remedial math to apprentices enabling them to advance on the job and obtain credits leading to the A.A.S. degree in technical education. The college also made improved guidance services available to the apprentices.

Many programs were offered in occupational fields to interest self-employed persons so as to serve the needs of individuals in the community as well as large businesses, industries, and labor unions. Westchester BOCES, for example, initiated several new small business management programs to serve the growing number of independently employed small business entrepreneurs within the county. Additionally, two new 60-hour courses in botique shop operations were offered, covering such topics as retailing, fashion, window display, advertising, and personnel management. The Queensborough Community College, in cooperation with the Commerce Department and local business organizations, introduced a training program to upgrade the skills of minority businessmen in the principles and practices associated with ownership and management of businesses. Monroe Community College, in conjunction with the Office of Minority Business Enterprise, offered a similar program for minority group members entitled Minority Business Management. Another component was added to this program during the spring cycle offering the same courses in Spanish for Spanish-speaking business owners.

During fiscal year 1975, major emphasis was placed on increasing activities designed to enhance the quality of occupational education programs and supportive services for adults. Group and individual guidance and counseling services to assist adults with personal, educational, and occupational problems; as well as selecting appropriate job training or available job opportunities were supported with VEA funds in 25 BOCES centers and two major cities--Buffalo and New York City.

Nassau County BOCES, for example, expanded and improved supportive services for adults from a year ago. Significant developments were made in the areas of career counseling, emotional and physical health counseling, occupational testing, placement and followup services, plus job orientation and work attitudinal development. Services in each of these areas were available to every person enrolled in the Nassau BOCES adult programs. Intercommunication with counselors from cooperative agencies was also strengthened so that the most complete services possible could be provided to students with special needs. Elsewhere, the Erie #1 BOCES reported increased utilization of its three counselors by persons enrolled in their adult program. Those services most frequently requested were aptitude testing and informational services concerning available training opportunities and/or job openings in the Buffalo metropolitan area. The Onondaga, Madison BOCES developed a psychological testing program to assist adults and their counselors pair personal traits and educational qualifications with those usually associated with an occupation or group of occupations.

New York City implemented a cooperative education guidance program whereby four area universities provided graduate guidance students to assist guidance counselors in serving the increased number of adult trainees in the evening trade schools. Outreach programs to placement agencies were expanded to provide adequate counseling services in all areas of the city. New York City also installed a phone service program, dial-a-counselor, to provide prevocational exposure and information to adults. The CUNY Research and Development Center, with VEA assistance, sponsored workshops to counsel adult women on career opportunities and related training offered at the various 2-year public colleges of CUNY. Workshops were conducted at Bronx Community College and Kingsborough Community College during fiscal year 1975.

Increased flexibility in scheduling adult program offerings through more extensive utilization of modular, daytime, and Saturday scheduling has afforded adults greater access to occupational education programs. The Mid-Westchester BOCES, for example, used its day secondary program to offer training opportunities to adults during the day on a space available basis. The city of Syracuse expanded an ongoing daytime licensed practical nursing program for adults. Farmingdale Agricultural and Technical College offered seven courses in four Long Island communities to prepare adults for the field of day care services.

Scheduling was based entirely on student preferences. Class meetings ranged from 3 hours a night, twice weekly, for 8 weeks to 2 hours a night, once a week, for 15 weeks.

Cooperative arrangements were maintained between local BOCES and public 2-year community colleges to achieve maximum feasible utilization of facilities and other resources. For instance, a total of 70 different adult courses in several occupational fields were conducted under the joint sponsorship of the Orange County BOCES and Orange County Community College. Nassau County BOCES was involved in a cooperative registration program with the Evening Extension Division of Farmingdale Agricultural and Technical College to reduce duplication and provide more programs at different levels. The Chautauqua County BOCES offered all its adult programs in cooperation with Jamestown Community College. The BOCES and community colleges issued special certificates to adults completing a sequence of courses constituting a unified program of study.

Eighteen BOCES throughout the State received VEA support during fiscal year 1975 for coordinators of adult occupational education programs for the purpose of developing organizational structures for more comprehensive adult occupational education programs.

ADULT

DISADVANTAGED

- Goal: Serve disadvantaged adults, including out-of-school youth with particular attention to areas which have severe problems of unemployment, underemployment, and high school dropout rates.

Objective

Increase the number of disadvantaged adults enrolled in occupational education.

Accomplishment

The number of disadvantaged adults enrolled in occupational education programs increased sharply during the past school year from 15,263 to 49,280. Of the 49,280 students, 930 were enrolled in the BOCES area centers, 40,156 in the five major cities, 556 in the other local public secondary schools, 276 in the public 2-year colleges and 7,362 in the educational opportunity centers. The reclassification of adult occupational enrollments, as explained in the statistical preface of the report, had virtually no impact on the level of disadvantaged adult enrollment.

Description

In the BOCES area centers, major cities, and local educational agencies, six new programs were started to serve 660 adults and 15 expanded programs served 1,198 disadvantaged adults. In addition, the public 2-year colleges served 1,896 adult students through nine new and expanded programs.

Due to the state of the economy and increasing unemployment, it became even more essential to focus adult programs on providing occupational education in areas where there were job openings. Licensed practical nurse programs proved to be successful in meeting the manpower need for health personnel while providing upgrading or new skills to disadvantaged adults. The Westchester County BOCES #2 started two licensed practical nursing programs; one a beginner course, and the other a refresher course for those adults desiring to return to employment. Special assistance was available for those students preparing for their licensing examination. Local school districts indicated that there was a great personal interest in such courses as well as a need for trained personnel reported by area hospitals. Another new program at the Albany, Schenectady, Schoharie BOCES enabled nurses aides, unable to learn their jobs because of income loss, to receive training

for upgrading to licensed practical nurse. The program provided the students with the knowledge and skills necessary for pursuing the licensing examination. Many of the hospitals released employees from work so that they would be able to attend the program.

A licensed practical nursing program in the city of Yonkers combines work experience with classroom training. Disadvantaged adults who completed the nursing assistant course participated in classroom and laboratory instruction before entering the clinical phase of the program. Students received practical training in a cooperating hospital which was supported with classroom instruction on alternate days. The construction of new nursing homes and the enlargement of hospital facilities in the Yonkers-Westchester area should result in many job openings in the health services field.

Programs were established to upgrade the skills of underemployed adults as well as to redirect the efforts of unemployed adults to occupations in which job openings exist. A program was expanded by the Genesee, Wyoming BOCES to provide on-the-job training for 120 employees at five food processing plants. The training took place during working hours and supportive instruction was given during the employees' free time. Bilingual instructors conducted the sessions and kept evaluative skills checklists on all students. Program completees were eligible for more skilled jobs at higher salaries. Low income rural adults were served through a basic construction skills program conducted by the Steuben, Allegany BOCES. Several community groups have provided some of the resources for the operation of the project. Fifty weeks of on-the-job training was offered while adult students constructed new low cost homes and renovated old units. Program participants received counseling and placement services, and completees were qualified as masons, carpenters, plumbers, and electricians. It was anticipated that these occupations should provide a substantial increase in salaries for the unemployed and underemployed adults.

Bilingual occupational education programs were established to increase the employability of disadvantaged adults and to upgrade persons underemployed because of language difficulties. In the city of Rochester, the Spanish-speaking population has increased considerably in the last decade. To meet the needs of this population group, a bilingual occupational education program was initiated to provide training to 400 adults in the fields of health occupations, food services, social services, clerical occupations, automotive trades, construction occupations, electrical trades, and metal trades. Full-time bilingual instructors were employed, and the program coordinator provided inservice training for the staff, supervised classroom instruction and curriculum development, and made contacts with business and industry leaders. Counseling, job placement, and followup services were available also. Bilingual personnel were reported to be employed by many BOCES to serve Spanish-speaking students in many occupational education

programs. At the Hempstead Center in Nassau County, for instance, bilingual aides were available to provide services to disadvantaged young adults enrolled in health service, business education, food services, and sales occupation programs.

New programs were initiated and successful ones expanded to serve special segments of the disadvantaged population having particular occupational and/or employment problems. The Genesee, Wyoming BOCES added summer courses to offer migrant workers occupational training from 6 to 12 weeks. The areas of instruction included building trades, automotive services, and supermarket-restaurant occupations. Trainees were recruited, transported to the occupational education center, and instructed in the fundamental skills of one or more of the occupations. The use of tools and machines, safety and development of social skills were emphasized. The program was designed to provide trainees with the skills necessary for entry-level semi-skilled jobs. An additional program provided 45 weeks of occupational training and exploration for migrants. Each student received instruction in the areas of farm mechanics, welding, and automotive service. These courses were selected for their suitability to the backgrounds and interests of migrant students and because they give students the option of upgrading their skills in farm-based occupations or entering another occupational field. Those students who completed the course requirements had the opportunity of enrolling in the regular adult occupational program for more advanced training.

A new program involving inmates from the Onondaga County Correctional facility was initiated by the Onondaga, Madison BOCES. This program allowed inmates to pursue occupational education training which followed the structure of the regular adult occupational education programs. Courses included switchboard operator, typing, keypunch, drafting, and data processing. An occupational education program for inmates of a correctional institution was expanded at Clinton Community College. Business management instruction was offered by the college, and counseling and academic guidance was a supplementary service.

The development of short-term programs helped disadvantaged adults to learn basic skills for immediate employment. The city of Buffalo expanded special short-term programs in building trades, automotive trades, and food preparation. The building trades classes were scheduled during the daytime to allow students to develop skills for construction of modular homes, and the remodeling of older homes. Other classes were held 3 evenings per week in five schools. This expanded schedule is designed to meet a growing demand for adult occupational education. New York City designed classes in 15-week segments which were offered in school and community facilities on a 2-hour, twice per week basis. Time schedules were varied at the convenience of the students. Instruction was in office education and included classes in elementary and advanced typing, calculator operation, key-

punch operation, elementary and advanced stenography, machine transcription, bookkeeping, and recordkeeping. Remedial courses in guidance, and placement were some of the supplementary services available.

Special instructional techniques were used in the classroom to more effectively serve the needs of the disadvantaged. New York City, for example, began the development of a pilot program employing programmed learning modules to enable students to study at their own pace. This type of instructional method is particularly useful for disadvantaged adults because their levels of academic and occupational attainment vary so greatly. The program was designed to use commercially available programmed learning equipment in the recognition, application, and use of hand tools and in the behavioral training needed for success in the world of work. Behavioral modules assist students in developing the skills for effective communication, problem-solving, and organization along with sound attitudes and self-awareness. In a similar manner, Rochester developed a behavioral oriented curriculum which utilized video and audio tapes, films, articles, questionnaires, workbooks, and other printed matter. This unique instructional package entitled "Life Skills Employability Series" was designed to help students select, obtain, and keep jobs. Some of the program units focus on specific employment and career problems faced by many adults.

An interesting program at the Fashion Institute of Technology trained adults to be self-employed in fabric printing and designing. Instruction was provided in the silk screen process, printing practices, color mixing, multi-screen printing, and dye systems.

Programs conducted at the BOCES and city centers and 2-year community colleges were established to assist community residents as well as provide basic skill training to adults. The Monroe County BOCES #1 continued a program for 130 out-of-school youth to learn skills in the building trades while renovating homes in the community. Classroom instruction was made relevant to the work phase so that students would maintain an interest in carpentry, plumbing, masonry, electricity, sheet metal, and other building trades. Building trades students in Buffalo also learned the skills necessary for remodeling older homes, as well as for the construction of new modular homes. Classes were conducted 3 evenings per week in five schools. The schedule was expanded to meet a growing demand for adult occupational education. In addition, Bronx Community College expanded a program for 60 disadvantaged adults in maintenance and rehabilitation of inner-city housing. Six courses were offered and met 3 hours per week.

The disadvantaged segment of the population is often unaware of the occupational education opportunities available to them. For this reason, public relations techniques are used to inform adults of the many programs being offered. The city of Buffalo, for instance,

appraised residents of the community of the adult occupational education offerings through the local media and community meetings. In the Albany City School District the parents of each student were sent a school calendar containing descriptions of adult program offerings. Additionally, adult education was the subject of many speeches given at community agency, Red Cross, and city club meetings.

Over the past few years, counseling and placement services especially designed to serve the adult population have been instituted. New York City Community College developed an individual counseling and occupational testing service working through 17 community groups, agencies, and organizations. Twenty career workshops were provided involving 192 disadvantaged adults. Bronx Community College expanded a job placement program for those adults enrolled in occupational education at the college.

Many occupational education teachers participated in workshops which expanded their knowledge of problems disadvantaged adults encounter. Based on the previous developmental activities and field work and liaison with the State correctional agencies, a joint workshop was held involving about 30 public school occupational trade, industrial, and service education teachers, and 15 instructors in the same instructional areas from the State correctional facilities. This workshop, held in February, was for the purpose of acquainting each group of teachers with different problems and of discussing possible solutions to mutual problems. Appropriate followup measures have been taken with procedures developed to allow exchange visitations of the two groups of teachers and their respective schools and correctional facilities.

- Goal: Assist out-of-school youth and adults living in economically depressed urban and rural areas in improving their knowledge and skills as consumers, homemakers, and family members.

Objective

Increase the number of adults served by consumer-homemaking education including those served by comprehensive consumer-homemaking programs in economically depressed areas.

Accomplishment

A total of 92,306 adults were enrolled in consumer-homemaking programs in 1975. This figure represents an increase of 21,995 adult students.

Description

Short-term consumer-homemaking programs serving disadvantaged persons continued to be developed and strengthened last year. A new project at Tompkins, Seneca BOCES was added to the existing 13 projects. The projects were located in both urban and rural areas across the State and served a variety of people such as: migrants; low income Puerto Ricans, blacks, and whites; rehabilitation and out-patients; and senior citizens.

The short-term programs were characterized by independent but sequential sessions scheduled periodically for a block of time. Program offerings varied depending on the needs and concerns of the local groups being served. Some topics covered were: consumerism in relation to clothing, foods, and housing; home accident prevention; food preservation; clothing repair and construction; nutrition and meal planning; home repair and decorations; and gardening. Program instruction was often accompanied by field trips to places such as nursing homes, utility companies, and clothing and fabric stores.

In the Tompkins, Seneca BOCES program, a series of presentations were held which provided homemakers with the skills and practices which help to maintain good health. Approximately 10 meetings a month for a period of 6 months were held at sites throughout the county. Approximately 100-125 individuals participated each month. Eight homemaking aides served as discussion leaders and a consulting home economist planned and evaluated the program and trained the aides. The home economist made onsite visitations and assessed the need for program change. The instructional content of the program consisted of segments on: nutrition and pregnancy, and infant and child feeding; growth and development during adolescence; nutrition and aging; heart disease; tooth care; home and food sanitation; and meal planning, budgeting, and food buying. All presentations were followed by the visits of the nutrition aides to the homes of the participants for purposes of providing further information and program evaluation.

St. Lawrence County BOCES presented a family care program to patients of the St. Lawrence Psychiatric Center. Patients participating in the 11-week program learned or relearned basic cooking procedures as well as the planning and preparation of meals based on solid nutritional practices. Many of the patients had been eating cafeteria style food for 5 to 25 years and therefore had lost most of their food preparation skills. A major activity of the program was the planning and preparation of a special dinner to which guests were invited. A field trip to purchase the necessary supplies provided the patients with their first outing from the hospital since their admittance. Several of the program participants have been moved into community home-living situations as a result of the skills and confidence gained in this program.

In the South Seneca School District a speaker from family court and the probation department dealt with child abuse and neglect. As a result of the interest of the participants, a case worker from Child Services of the Seneca County Social Services Department discussed the new child protection law, the use of child protection services, and sources of help for parents unable to cope with their children.

The following are other examples of program activities. Enrollees in the Franklin County BOCES program were given lessons in electricity as related to home needs. They were instructed on making minor repairs on small appliances, changing plugs and electrical wall plates, and performing electrical fire safety examination in their homes. A program in Brentwood School District focused on seasonal foods available from Long Island farms and on methods of preserving fruits and vegetables for year-round use.

Comprehensive consumer-homemaking programs were expanded and strengthened in over 50 locations throughout the State. These programs were available to adults and out-of-school youth in economically depressed urban and rural areas of the State. They were located in a variety of facilities such as: housing projects, storefronts, community centers, church activity centers, mobile teaching units, jails, supermarkets, parking lots, shopping centers, State hospitals, and rehabilitation centers.

Participants were involved in programs that focused on topics such as: the energy crisis; consumer practices as related to home and family needs; unit pricing; home safety; and child, family and personal relationships. The supervised child care which was often available provided a variety of learning experiences for small children.

As part of the Schenectady project a pilot program was offered to 30 adults who had been identified as socioeconomically disadvantaged and in need of parenthood education. The program was offered 1 day a week in cooperation with the Schenectady Child Guidance Center and the Child Protection Unit of the Schenectady Department of Social Services. The goals for the program were: to provide the participants with an opportunity for socializaiion and rehabilitation through working in a group setting; to improve homemaking skills; and to develop greater use of community resources. The participants were generally enthusiastic about the program activities and according to the observations of the social workers were using better homemaking skills.

In Nassau County a variety of programs were undertaken. A presentation on nutrition labeling given by staff from the Nassau County BOCES at a shopping center during Vocational Education Week drew about 800 participants. Sessions included programs on surviving the economic crunch, unit pricing, and psychology of the grocery store. As a result of the favorable community reaction the shopping center offered the use of a booth in which regular presentations could be conducted. Also in Nassau County a child study group consisting of 32 parents from the Roosevelt school district observed a demonstration by two aides who had participated in a workshop sponsored by the consumer-homemaking program at Nassau BOCES. The demonstration featured displays of nutritious snacks for children, a discussion on selecting and preparing nutritious snacks; and ways of making eating a learning experience. In Great Neck, the public school in cooperation with the Chamber of Commerce and art florists expanded community garden plots from 56 to 156 during the year.

The comprehensive program conducted in Syracuse created the following positive situations. Due to a lead poisoning program, a participant had her grandson tested for lead poisoning. Since the test was positive the child was immediately treated for the condition thereby preventing further physical injury or death. A woman who attended a series on child development reclaimed her children from a foster home as a result of increased confidence in her ability to understand her children and herself.

The Elmira program sponsored a food fair with Cooperative Extension. Over 600 people attended the workshops, held at Elmira College, on different aspects of food consumerism, nutrition, and budgeting. The Elmira program also sponsored a 2-week series of lessons on preserving foods from the garden.

The Genesee, Wyoming program provided a senior citizen low income housing project with a food purchasing program. The purpose of the program was to provide information on: the new unit pricing system; the modern forms of foods, including convenience foods; the nutritional value of food; and better use of seasonal shopping and shopping specials. Participants in the Genesee, Wyoming program also planned and supervised the preparation of 100 dinners by BOCES migrant students. This affair was part of a "Home-School-Community Night" sponsored by the migrant summer school staff. This event provided an opportunity for migrant families to meet the children's teachers and to learn about community agencies.

Other examples of activities at programs throughout the State, are as follows: in Herkimer County participants were instructed in making toys from objects that would normally be discarded; in Buffalo a mentally retarded girl was provided a special program dealing with

essential housekeeping, budgeting and consumer skills; the program staff in Albany gave live demonstrations in supermarkets on product labeling; the Troy program offered a series of plant clinics and trained several mothers to teach a macrame mini course to 5th and 6th grade students in a neighborhood school; in Yonkers the Office of Consumer Protection presented a program on consumer rights and common fraudulent practices which provided general facts and assistance with specific complaints; and in Rochester the program newsletter was translated into Turkish and distributed to 200 Turkish families in an effort to encourage their participation.

Objective

Increase the number of professional staff from comprehensive adult consumer-homemaking centers who participate in inservice activities which focus on identifying effective methods of working with the disadvantaged.

Accomplishment

Two hundred thirty staff members from both comprehensive and short-term programs were involved in a 2-day institute at seven different locations in the State. This is a considerable increase over last year when 64 staff members attended an institute.

Description

A new concept was explored last year on conducting institutes for professional and paraprofessional staff of adult consumer-homemaking programs. Instead of all staff members attending the same institute, workshops were established to meet the needs of consumer-homemaking personnel in their regions. The major program emphasis at all locations was on consumer education and its impact on the participants. Other topics covered were communications, public relations, and recruiting, and their contributions to meeting the consumer needs of the disadvantaged.

Those attending the institute at Elmira were guests of the Ann Page Production and Processing Center in Horseheads for a half day tour of their production, processing, testing, and new products laboratories. The participants gained valuable information on the functioning of a large food distribution company and its responsibility to the consumer.

At other institutes communications specialists from various media conducted sessions on the use and availability of public and private communications to relay information to the public and to aid in recruiting participants for consumer-homemaking programs.

Participants at all institutes shared sources and information on successful programs. This aspect of the program was evaluated as being one of the most useful in providing new ideas, topics, and resources.

ADULT

HANDICAPPED

- Goal: Provide opportunities for handicapped adults who require special services or programs, in order to succeed in occupational education.

Objective

Increase the number of handicapped adults enrolled in occupational education.

Accomplishment

During the 1974-75 school year, a total of 1,016 handicapped adults were reported to be enrolled in occupational education programs. This number is more than 50 percent above the previous year's total. Only a small part of this increase was attributable to this year's reclassification of adult occupational education enrollments.

Description

Fourteen programs federally funded during 1974-75 served 2,300 handicapped adults in secondary agencies. At the 2-year public colleges, two expanded programs enrolled 400 students.

Reports from area and major city occupational education centers indicated that whenever possible, handicapped adults were included in the regular occupational program. Those programs initiated and expanded were designed to serve the special needs of the handicapped providing them with employment training.

Continued support was provided for two programs which prepared residents of State hospitals for meaningful work in the institutions, and eventual independent employment. The Broome, Tioga BOCES expanded a program operated in cooperation with the Binghamton State Hospital. This program, described in last year's report, served an additional 20 students in 1974-75. Students progressed through gradual stages from exploratory experiences to paid employment. Initially, part-time employment provided by the hospital gave students confidence in their ability to work. Students who succeeded in this stage were employed outside of the hospital in jobs secured through a cooperative effort on the part of BOCES and the hospital rehabilitation service.

The city of Yonkers continued their program for emotionally disturbed residents of Rockland State Hospital. Students attended classes in office occupations, ornamental horticulture, building maintenance and food services at nearby instructional centers 3 days per week. The after care unit assisted the instructional staff by providing a psychiatrict and a mental health therapy aide as consultants.

Experimental programs were started to find new ways of serving handicapped adults. A multiphased approach for serving the physically handicapped was developed in Rochester. The first phase was exploratory allowing handicapped adults the opportunity to investigate the various areas of instruction and to discover what employable skills may be developed. The second phase was concentrated in occupational areas where job openings exist and there is the potential for placement. Job skills are perfected in this phase of the program. The last stage is that of actual placement on a job.

An experimental pilot program in its second year at the Nassau BOCES provided individualized occupational education to unemployed adults having a variety of handicapping conditions. The occupational education counselor interviewed each adult, determined what type of employment would be suitable, provided preemployment instruction, and placed the student in a job. The counselor and the employer met biweekly to discuss the employee's progress and to determine if remedial assistance was necessary. Students who had progressed satisfactorily on the job were eligible to enroll in a program to upgrade their skills.

Other types of counseling and placement services were developed to aid handicapped adults in their pursuit of employment. New York City provided occupational counseling and placement services to mentally retarded, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or otherwise disabled adults. More than 60 different firms were involved in the program having employed handicapped adults. Job developers worked to increase that number. A special placement counselor and counseling aide provided services to handicapped adults enrolled in occupational education programs at the Albertson Center in the Nassau County BOCES. The special features of the center include walk-in service, continuous admission, year-round day and night classes, and physical facilities adapted for the use of handicapped students.

Special outreach and counseling was provided to former drug addicts through an expanded program at Staten Island Community College. If adults were interested and displayed the aptitude, they were enrolled in business and computer science courses. Close liaison with community based after care centers was maintained and some of the courses were offered at these locations. Students were afforded the opportunity to enter the regular full-time program at the college upon successful completion of the preliminary program.

Job developers in New York City working in an occupational education program for the hard of hearing, used several techniques to place handicapped adults in employment. Many jobs were located through telephoning, canvass mailings, and contacts with unions and appropriate

business and industrial associations. Each student's education and employment record was evaluated and a job developer matched ability and personal needs with available employment.

On-the-job training was frequently provided to handicapped adults to make instruction as direct and practical as possible, and to ease the transition from school to work. An expanded program at the Nassau County BOCES provided full-time supervised on-the-job training for clusters of up to 10 handicapped adults in seven cooperating industries. Program participants received skill training, counseling, work related instruction, and remedial education.

The Monroe County BOCES #1 continued a work experience program for 150 trainable mentally retarded adults. In addition to receiving specific job training, these adults worked on a production operation and performed such tasks as boxing, labeling, weighing, and postage metering. Students were paid for the work performed and will be placed in full-time employment when they have demonstrated social and educational readiness.

Seventy-five mentally retarded students who had completed the city of Rochester's academically oriented special education program and who were in need of realistic occupational instruction leading to employment participated in a new "Business on Loan" program. These students explored occupational areas and received instruction on actual community job sites. Careful supervision was provided to study student skills and work attitudes. Those adults having satisfied program completion requirements were placed in full-time jobs best suited to their needs and intersts.

A special service was provided to mentally and or emotionally handicapped adults who returned to the community after receiving treatment at the St. Lawrence Psychiatric Center. The St. Lawrence County BOCES provided programs designed in conjunction with the Psychiatric Center to employed adults in need of basic skills or upgrading to allow them to make a smooth transition from in-hospital care to complete independent living.

Certain equipment often was purchased and facilities renovated when physically handicapped adults needed special devices to succeed in their occupational training programs. For instance, a number of devices in Rochester were fabricated for the handicapped. They were developed for individual use as needed. A community group of both physically handicapped and able-bodied persons worked very closely with the total occupational education program to assist the planning and implementation of programs altering materials and equipment to meet the needs of the students involved.

MULTILEVEL GOALS

This section of the report describes the State's accomplishments during fiscal year 1975 in relation to a variety of goals which have implications for all educational levels.

- Goal: Assist in diminishing the barriers to employment that may be encountered by various segments of society, including the aged, handicapped, women, disadvantaged, and other minority groups who may experience job discrimination.

Accomplishment

Analysis of enrollment data concerning black and Spanish-surnamed Americans collected through the Occupational Education Data Subsystem indicates that minority group members constitute approximately the same percentage of the occupational education enrollment as they do of the overall public school enrollment. Further analysis of enrollment and followup data should assist in defining the role of occupational education in eliminating barriers to employment resulting from discrimination.

The total enrollment in public occupational education during 1974-75 was 656,875. Of this total, 92,347, or 14.0 percent, were black; 43,224, or 6.6 percent were Spanish-surnamed Americans; 5,450, or .8 percent were Oriental; and 3,580, or .5 percent were American Indians.

- Goal: Provide leadership to achieve goals and objectives of occupational education in accordance with Federal, State, and local policies, rules, and regulations.

Description

Federal funds were used to provide administrative leadership in occupational education through partial support of the staffing and related expenses of the State Education Department, including support of the staffing of the Research Coordinating Unit.

The activities of the State staff included administrative functions of occupational education planning and resource allocation, and consultive and supervisory services for improvement of instruction.

The Research Coordinating Unit provided consultant services to educational agencies regarding development of research activities, disseminated information and research findings in occupational education, initiated "in-house" research activities, and coordinated the occupational education research effort with other State research activities.

A portion of the State's Education Professions Development Act (EPDA) allocation was utilized to support the salary and related costs of the EPDA coordinator, who supervises and coordinates all EPDA funded activities related to occupational education.

Direct cost support was also provided through VEA funds for applicable administrative and supervisory positions in major cities.

The 1975 State Plan earmarked $300,000 to assist in the development of coordinated regional planning among the public and nonpublic occupational education agencies in each region of the State, to ensure that a cost-effective system of programs and services will exist to meet the occupational needs of people and the manpower needs of employers in each region. Guidelines for regional planning have been developed by the State Education Department, and the regional planning process will be implemented during fiscal 1976, supported by carryover dollars.

- Goal: Continuously reexamine and strengthen the relationship between occupational education programs and current and anticipated employment opportunities.

Accomplishment

In fiscal year 1972 a Department staff member was designated as industry-education coordinator, with full-time responsibility for coordinating efforts to improve two-way communication between educators and employer and employee groups.

The coordinator's activities during the past 4 years have included: dissemination of information within the educational community and to business and industry regarding the intended function of occupational education; assistance to educators and employers in developing new and expanded work experience opportunities; planning of educational opportunities which orient teachers to the needs of business and industry, through summer tours, industrial workshops, summer industrial employment, and participation in regional councils of scientific and technological societies; groundwork for establishing improved contacts with organized labor at the local level; and participation in workshops on the educational uses of community resources.

The following are selected from a wide variety of activities engaged in by the State industry-education coordinator during the 1975 fiscal year: consulted with teacher educators on industry-education coordination, including cooperative education; represented SED on task force of employers and educators seeking to encourage and assist minority business enterprise; arranged for contacts, including exchange programs, between leaders in education and in business and industry; assisted in development of regional industry-education coordination efforts; visited various industries and education programs in six European countries--Netherlands, Germany, Luxembourg, Belgium, France, and England, to study methods of industry-education coordination in these countries; made an extensive number of contacts with groups of employers and educators throughout New York State, including presentations to groups on industry-education coordination.

Beginning with the 1973 State Plan, provisions have been made for establishment of regional industry-education coordinator positions to serve specific regions of the State. Continued partial VEA support was provided during fiscal year 1975 for employment and training of regional industry-education coordinators in Monroe, Oswego, Onondaga, and Erie Counties. In addition, coordinators were active in the city of Niagara Falls and in New York City, although VEA funding for these projects has expired. A locally funded industry-education coordination project serves Tompkins County.

The following are specific examples of activities carried out by two regional industry-education coordinators during fiscal year 1975. The industry-education coordinator funded through the city of Rochester reported the following accomplishments: expansion of the career observation program to all senior high schools, with 533 students having career observation sites in 1974-75; expansion of the concept of career days to other senior and junior high schools, bringing to 3,600 the total number of students exposed to career consultants during the school year; assistance to 250 teachers, counselors, and administrators in understanding the needs of business, industry, and labor, through indepth presentations by business and industrial groups; developmental work in forming a Monroe County Education/Industry/Business Council; updating of a career resource directory for metropolitan Rochester; presentation of a multimedia workshop for 113 occupational education teachers; continued development and maintenance of a mailing file to improve communications between education and the business-industry-labor community; presentation of a countywide public relations program on occupational education, viewed by an estimated 30,000 people.

Activities of the Niagara Frontier Industry-Education Council, with headquarters in Buffalo, were reported as follows: a graduate level workshop on occupational awareness, meeting weekly at area offices and factories, serving a total of 258 teachers; preparation of a resource bank and book containing names of over a thousand potential

speakers available to classroom teachers; distribution of printed materials available for use in planning career days; implementation of high school internships, in which high school seniors are released from classes for a semester to work with executives, now serving 18 students; work on a mathematics for elementary school teachers workshop, in which the mathematical skills needed to function in the world of work are identified; arrangement for teacher exchange days, in which teachers work in area companies and government agencies, currently serving six teachers; administration of Operation Enterprise Scholarships, a 20-week high school program conducted by the American Management Association; coordination of an executive exchange program, whereby school superintendents and executives in industry, business, labor, and government team up for a typical working day; implementation of economics training for teachers serving 75 teachers in a workshop on new techniques in teaching economics; conducting of a television and radio information campaign, to alert the general public to the importance of career awareness; extensive meetings with guidance counselors to acquaint them more realistically with the workd of work; establishment of a career information clearinghouse, a data bank to include education and employment opportunities and labor concerns on the Niagara Frontier; coordination of efforts with the Department of Mental Health, Junior Achievement program, Joint Council on Economic Education, National Association of Manufacturers, National Alliance of Businessmen, and other groups concerned with industry-education coordination.

- Goal: Conduct research, evaluation, curriculum development, exemplary, teacher education, and guidance activities designed to enhance the quality of the State's total occupational education program.

Accomplishment

Because of the number and variety of activities involved, the narrative description of accomplishments under this goal has been divided into the following items: Management Information System; Research and Development Institutes; Other Research and Evaluation; Exemplary; Teacher Education; Curriculum; and Guidance.

MANAGEMENT INFORMATION SYSTEM

To assure accountability for an occupational education system that is responsive to the needs of people and the labor market, the Office of Occupational and Continuing Education, of the New York State Education Department has, since 1971, been working with Riverside Research Institute (RRI) of New York City in the design and implementation of a Comprehensive Instructional Management System for Occupational Education (CIMS/OE).

In the first year, RRI in conjunction with Department staff assessed the State's occupational education reporting and evaluation needs and formulated the broad framework of an instructional management system consisting of three subsystems; the Reporting and Evaluation System for Occupational Education (RESOE), an Instructional Support Subsystem (ISS), and a Targeting Subsystem. The development and implementation of each of the several subsystems, while interrelated, are proceeding independently of one another and are at present in various stages of either design or implementation.

RESOE is a large system by virtue of the amount of data maintained and processed, the number of agencies served, and the number of functions it is intended to support. The RESOE system, has by strategy, proceeded in two distinct stages. Stage one, the basic system of establishing individual student files consisting of enrollment and followup data needed to fulfill reporting and planning requirements, has now been implemented throughout the State in every BOCES and most local school districts. Stage two, involving the use of RESOE for special reporting requests, at all operating levels, as well as for local and regional requirements with respect to evaluation, cost accounting, guidance studies and other administrative processes will proceed based on identified local needs and following the full implementation of the individual student enrollment and followup files.

Major emphasis has been placed on stage one processes. During the 1971-72 school year RRI carried out a systems study at the Nassau County BOCES, studying existing operations and procedures for State and Federal reporting and assessment of program effectiveness as well as developing and partially testing a reporting and evaluation system within the BOCES. During the 1972-73 school year, the reporting system was implemented in the Nassau County BOCES, partially in New York City, and in occupational education Planning Region #9, comprising Cayuga, Cortland, Onondaga, Oswego, and Tompkins Counties. In 1973-74, the system was expanded to include New York City and Regions 8, 10, and 11 as well as in Nassau BOCES and Region 9. Except for the LEA's in Nassau County, the reporting system was implemented in the remaining statewide occupational education planning regions during the 1974-75 school year.

Since RESOE followup procedures require the prior establishment of individual student enrollment files in order to be operative, this element of stage one will be implemented in all planning regions of the State during the 1975-76 school year. The data base provided, will allow for the establishment of base year data, as a benchmark against which annually collected data may be analyzed and evaluated, and will serve as one indicator of trends which has significance with respect to program planning, development and evaluation.

Applications of RESOE capabilities were demonstrated during fiscal year 1975 by a number of software revisions and additions which facilitated additional reports not previously provided. Some of the major ones were: providing information about private school students enrolled in publicly supported occupational classes; statistical analysis and adjustment of followup reports; and the execution of a 4-year regression analysis to predict labor supply, by program, produced by occupational education in the public sector.

With the completion of the RESOE enrollment and followup cycle in participating districts, efforts during the 1975/76 school year will include exploring the integration of RESOE processes with other local school administrative procedures, through the State's network of regional school computer services. It is anticipated that this would substantially reduce reporting requirements, provide a more rapid turn around from data input to information retrieval, and enable the information system to be more responsive to local or regional occupational education information requirements and special applications of the RESOE system.

Development of the Instructional Support System for Occupational Education (ISS/OE), the second of three subsystems which comprise the Department's Comprehensive Instructional Management System has moved from the basic design stage to that of testing. ISS/OE will be a modularized, performance-based curriculum with a monitoring system for measuring individual student progress and achievement. The process utilizes a bank of behavioral objectives, modular curriculum units and skills checklists. It will permit periodic reporting and review of student achievement and provide for evaluation of progress against the student's career objective.

Supported under a USOE grant, initial steps of implementation for the ISS/OE project got underway late in fiscal year 1975 with the appointment of a project coordinator and the identification of work efforts by the Cornell Institute for Occupational Education for the development of curriculum aspects and by Riverside Research Institute for the development of the programmed systems element. Accomplishments to date include: the selection of the occupational education program areas for initial testing, identification of test sites, an administrative conference for superintendents and occupational education directors, a 3-week curriculum workshop for the development of performance-based modularized curriculums in automotive mechanics and office education.

The plan for the 1975-76 school year is to make ISS/OE operational at the five test sites. Major activities will include the following: initiation of a performance-based curriculum in the auto mechanics and office clerical cluster at the test sites; completion of specifications

with the field trial of a computer support system in the two cluster areas; curriculum workshops at the sites, as well as regionally and jointly with the upstate and downstate regions; production of a manual for instructional use, providing detailed knowledge of the ISS/OE test clusters; development of summary supervisory and administrative report forms relating to ISS/OE student progress; preparation of planning proposals for extending and expanding ISS/OE for the second year; and final reporting and evaluation by all agencies involved.

The third subsystem in the Comprehensive Information Management System, Targeting, relates to decisionmaking with respect to manpower needs and establishing a system of long-term followup of individuals who complete an occupational education program. A system has been designed for the purpose of determining the extent to which certain occupations are maintaining stability, expanding, or contracting within a given geographical area. Additionally, information regarding in/out migration in any area of the State, of trained personnel seeking employment in a particular occupational field, will assist in administrative decisions with respect to the addition, continuation, or discontinuation of certain occupational education programs. The long-term followup aspect of the Targeting Subsystem will provide invaluable data on the cost-effectiveness of occupational education. At present the Targeting System design is being held in abeyance pending further analysis of needed steps for implementation.

RESEARCH AND DEVELOPMENT INSTITUTES

In fiscal year 1971, two Research and Development Institutes for Occupational Education were formed, one at the City University of New York, and the other at Cornell University, for the purpose of conducting studies and providing other services related to needed change in the field of occupational education. The City University center primarily focuses on urban and suburban needs; the Cornell center on rural and suburban needs. The two institutes received continued partial support through VEA funding during fiscal year 1975.

During the period 1971-75, the Institute for Research and Development in Occupational Education at Cornell University (CIOE) has identified and conducted research and development efforts in occupational education in the public schools and colleges of New York State. Twenty-eight members of the Cornell faculty and 72 graduate students have been involved in the conduct of research and development projects. In addition, program evaluation services have been provided in 23 instances under memorandums of agreement with BOCES, community colleges, and agricultural and technical colleges. Institute-generated proposals have brought resources of the Education Professions Development Act, the Higher Education Act, and the Elementary and Secondary Education Act, in addition to VEA funds, to bear upon research and development efforts identified in cooperation with SED staff.

The following studies were conducted by the Institute during 1974-75.

Career Education Institutes for Middle School

The project purpose was to provide an inservice experience for teams of middle school staff that will serve as a basis for integration of career education into local school curriculums. Five-week inservice institutes were held at seven public and four private colleges for middle school staff. Two onsite visitations to each site were made by CIOE staff during the summer session. In the post-session period CIOE has participated in the evaluation of team proposals for mini-grants, followup meetings and contacts with participants and directors, and identification of sample products. The final third cycle has been addressed through directors' conferences and meetings, distribution of materials and resources, interim reports, and the initial phases of data collection for a comprehensive summative assessment. Activities in 1975 will include the completion of the secondary level cycle, and a summative assessment of total effort.

Career Awareness Among the Educable Mentally Retarded

The project purpose was to develop a procedure for measuring the career awareness of EMR's in the 14 to 16 year old age group. The instruments developed were to be useful in planning occupational programs for EMR's and evaluating the effectiveness of emerging programs of career awareness and career exploration for EMR's. After a careful survey of the literature dealing with occupational education for EMR's, a survey of Department of Labor information on employment opportunities for EMR's, and work with teachers of EMR's, a testing device was developed and field tested. The project resulted in instrumentation and procedures for measuring career awareness among EMR's. The Institute intends to refine and format the instruments and a procedural handbook for dissemination within New York State during the fall of 1975.

Inservice Seminar for Directors of Occupational Education

In cooperation with the Office of Occupational Education of the New York State Education Department the Institute was host for the third annual Directors' Seminar, devoted to the directors' responsibility for management of the curriculum process. The 3-day meeting involved State Department staff, guest consultants, directors and CIOE staff in a variety of large and small group sessions devoted to many facets of curriculum management. The seminar activities have led to a proposal for a statewide curriculum resources exchange in addition to informal planning and sharing of curriculum products among the directors. Preliminary planning has begun for next year's seminar, which is tentatively planned to focus on managing the instructional process.

Cost/Benefit Study (Economic Returns to Occupational Education)

This project purpose is to develop and pilot an appropriate methodological approach for evaluating the economic benefits and costs of the secondary school occupational education programs of the Boards of Cooperative Educational Services in New York State. The project consists of four primary activities: (1) to critically examine the state of the art of the cost/benefit methodology of economics as applied to the evaluation of educational systems in general, and secondary school occupational programs in particular; (2) to develop a model of the most appropriate approach to evaluating the economic costs and benefits of BOCES secondary school occupational education programs; (3) to apply this model on a pilot basis with the cooperation of a local BOCES and the relevant local public school districts necessary to ensure an adequate control group; and (4) to evaluate the conclusions of this pilot study and to re-evaluate the methodological approach and its policy implications. The principal product will be the research report that will include findings as well as recommendations of appropriate methodology for future economic return studies.

Competency Identification, and Materials and Program Development for Competency Based Teacher Education (CBTE) in Agriculture

The project has three goals: 1) identification and validation of pedagogical and technical competencies needed by beginning and master teachers of agriculture; 2) development of instructional materials to provide learning experiences for development of needed competencies; and 3) development and testing of a procedural model for CBTE program for preparing teachers of agriculture. The activities have resulted in the development of a preliminary CBTE model and the identification of teacher competencies needed. Existing instructional materials are being surveyed for relevance to classroom use in the emerging program. As a result of Institute support this effort will be continuing, supported by other funds.

School Policies, Practices, and Curricular Choices

The study focuses on determining what factors are significant contributors to 8th graders' placement in high school program tracks with an emphasis on those students who go into occupational education. Questionnaires have been developed and administered to 8th graders in six schools. Data were collected from teachers, guidance counselors, and school records. Relevant literature was reviewed. The outcomes of this project include a professional paper delivered at the annual AERA conference and a CIOE publication summarizing the findings of the research.

Career Decisionmaking

The project's purpose is to pilot and evaluate "Career Decision Mini-Course," an instructional unit designed to improve students' decisionmaking skills at the secondary school level. An instrument to measure student decisionmaking skills was developed and validated. At each of six school sites, counselors and teachers cooperating in the field testing of the mini-course attended a 1-day training session in the use of the materials. Measurements of student skills were taken in a pre-instruction and post-instruction mode. Final validation and dissemination of the Career Decisionmaking Mini-Course is planned for early summer.

The Central Region Continuing Education Studies at Cornell University

The project purpose is to contribute to the improvement of existing continuing education services for adults through 1) the development of a model for optimal delivery of adult education information and counseling services, and 2) regional program planning, coordination, and resource rationalization for continuing education. Phase I of the project has encompassed an inventory of learning resources in the Central

region and an assessment of adult learning needs. Phase II now in process is concerned with alternatives for implementation of a proposed continuing education information delivery system and with facilitating decisionmaking in the development of continuing education policy. Products are 1) a 2-volume demographic publication on the Central Region, 2) four staff papers composing the theoretical base for the project, 3) a packaged slide presentation on continuing education and project findings, 4) an analysis of the learning interests and needs of blue collar workers, 5) an analysis and report of the findings from the needs assessment and resources inventories in the Central Region, and 6) the development of a typology of continuing education learning topics for storage and cross-referencing of information. The activities associated with Phase II of the project will continue throughout 1975-76. Staff will continue to hold meetings and discussions with providers of continuing education services and other interested groups to consider continuing education policy issues. An inventory of continuing education programs will be distributed to providers in the region to aid in cooperative planning efforts.

Inservice Strategy for Improving Local Evaluation of Two-Year College Programs

The purpose of the project is to develop a handbook for locally-based occupational program evaluation efforts in a cooperative field-based development and testing mode. The project has involved approximately fifty 2-year college staff members from 25 colleges in the development of the product and concurrent training in evaluation. A series of three workshops were held on a regional basis for participant access. The project will produce a pilot edition publication entitled "Reality-Based Evaluation for Two-Year College Occupational Programs." Assuming continuing support, the project staff intends to continue field testing of the guidelines in both a funded project and local program context. Components on re-assessing needs and cost analysis will be added to the guidelines.

Occupational Decisionmaking System

The project purpose is to revise, improve, and disseminate "A Decision System for Occupational Programs in Community Colleges" that was begun under grant support during 1973-74. The system has been field tested at four colleges, involving 12 staff, and introduced at several workshops, involving approximately 77 two-year college staff. The project will produce a publication, A Handbook for Two-Year College Program Planning, for general dissemination.

An Assessment of Needs for Professional Personnel for Occupational Education in New York State

The project purpose is to develop a system for determing additional professional staff needs by occupational area in regard to anticipated attrition and program growth. Activities include: 1) continuing a comprehensive personnel assessment of secondary level occupational education personnel in New York State; 2) developing and testing a system to project the quantitative and qualitative personnel needs for occupational education programs at all levels in both public and private agencies in New York State. A document will be produced that will delineate a system to incorporate the various phases of information collection and analysis needed to project future needs for occupational education personnel. The report will also include profiles of current occupational education personnel in New York State and projections of future needs of professional personnel for occupational education in New York State by regions and statewide. Building on the work performed, the needs assessment effort will address the postsecondary level in New York State during the coming year, supported by a VEA grant.

Instructional Materials Evaluation

The goals of the project are to develop a system for identifying and evaluating instructional materials in occupational and career education and to disseminate completed evaluations to educators in New York State. The two major activities of this project are 1) selection and training of approximately 250 New York State teachers in the evaluation process; and 2) editing and dissemination of completed evaluations of materials. Products include "Instructional Materials in Career Education" (May, 1975) a loose-leaf binder containing 135 evaluations of materials; 2) "Instructional Materials in Occupational Education," a loose-leaf binder containing approximately 225 evaluations of materials with a projected publication date of summer, 1975.

Career Involvement

The project purpose is to definitively examine the factors composing psychological involvement in one's career, and to determine whether this involvement can be measured through the construction of a Career Involvement Scale. The primary activity of this project was the collection of information in a personal interview mode from over 100 professional adults on their career history and personal involvein career events. The outcomes of this project include: compilation of a bibliography of over 150 titles; a graduate seminar on "Career Involvement" in the Graduate School of Public Administration; working papers concerning the definition of a career and relationship of self-esteem to the career; and tentative findings regarding the measurement of psychological factors. While funding terminates as of June 30, 1975, research activities will be continuing through the end of August in

seminar format and in individual work. It is expected that research activities will continue, leading to a grant proposal for further research.

Developmental Reading Program

The purpose of the project was to complete for commercial publication the autotutorial reading program for 2-year college students that was developed under grant support during 1973-74. The final editing was completed, copyright clearance obtained, and the materials submitted to the publisher. The instructional unit has been published commercially by Charles E. Merrill Co., entitled "Probe."

Two-Year Evaluation Contracts

The Institute staff performed external evaluation services for seven 2-year colleges related to the colleges' funded projects in occupational education. The activities included visitations, planning, consultation, data collection, and interpretations of results of project efforts. Interim and final reports on such projects are submitted to the local project managers. The Institute intends to continue such field services when requested.

Women in 2-Year Colleges

This project examines the characteristics and perceptions of 2-year college students related to factors that influence their educational and career decisions. This year's activity has focused on the collection of data from a representative sample of 2-year colleges in the City University of New York system. The final report will lead to an Institute publication of the research findings and implications for program planning, counseling, and placement that relate to women in the 2-year colleges.

Adult-Consumer Homemaking Regional Inservice Programs

The Institute performed administrative functions in these programs in cooperation with the Bureau of Home Economics Education and regional coordinators. The regional inservice workshops were held to provide an opportunity for professionals and paraprofessionals to identify and address local needs and to consider trends for future program planning and information needs. Regional coordinators were identified, and workshops were planned and held in seven regions of the State. The outcomes of the workshops will be determined and disseminated with the assistance of State Education Department staff.

Career Education Evaluation Contracts

Consistent with the Institute's effort to provide field services, under memorandum of agreement it has performed third party evaluation services for five regional career education projects. Consultations and visitations by cooperating professors and CIOE staff have been held throughout the year with the five regional projects. Support services have been provided as appropriate by CIOE research assistants. In addition, a 1-day conference at Cornell was hosted by CIOE and cooperating professors for the project coordinators to address common concerns. Informal support and services have been provided to all career education directors as requested and insofar as staff limitations permit. Interim and final reports are submitted to each of the five contracting directors.

The CUNY Institute for Research and Development in Occupational Education (IRDOE) was first funded in 1971 with the understanding that the sponsoring agency, the New York State Education Department, would withdraw support after a 3 to 5-year period. It was presumed that, if viable, the Institute would be self-sufficient within that period of time. The Institute has been perceived as "self-sufficient" by the State after this, its 4th year. The Institute is not self-supported, however, and will continue to rely on outside funding for the conduct of research, development, demonstration, and dissemination activities in occupational education.

In fiscal year 1975 the Institute placed greater emphasis on demonstration and diffusion/dispersion activities, and less on research per se. Reflecting preferences of the Federal government, and priorities of the Office of Occupational and Continuing Education, an attempt was made to utilize existing knowledge to effect desirable change in occupational education practices. Projects were designed to accommodate identified needs in the following areas: occupational delivery; serving new adult populations; enhancing articulation between community colleges and high schools; implementing strategies for handicapped populations; disseminating products of proven worth. IRDOE concentrated its efforts on demonstrating and testing viability of the programs described below.

Computer-Assisted Guidance

This project involves demonstration of a hardware/software configuration in five high schools, enabling 10th, 11th, and 12th graders to explore various occupations through searches based on their abilities and interests. Should postsecondary education be required, college searches are also available in the data banks. A major New York City bank awarded IRDOE an additional grant for further assessment of the

project and continuation of the operational phase through June 1975. The Board of Education continued its commitment of one teaching position at each of the high schools, and in concert with Citibank has verbally agreed to continuation and further development of the project through fiscal year 1976.

Community College Vocational Information System

Four community colleges have been involved in a project similar to CAG through an SED-VEA grant, with intent to demonstrate and test utilization for populations of postsecondary students whose occupational goals were not well-defined, who were dissatisfied with their occupational curriculums and would seek other occupational areas to enter upon, who needed information on vocational offerings not immediately available in their own institutions, etc. Adults, parents, and community people have availed themselves of the program during evening hours and on weekends. IRDOE is concerned with the utilization data, however, and had hesitated to request a continuation grant before additional data were collected. Preliminary assessment has signaled modifications in administrative behaviors to improve the circumstance, and a continuation grant has been requested. A multiplier effect has been evidenced outside the New York City area. Onondaga Community College, for example, has inquired about the potential for implementation in a center there, and IRDOE has provided consultation regarding such dispersion.

New Occupational Student: Mature Adult Woman

This project exemplifies the strategy described in CAG. It was designed to demonstrate at two community colleges, through a VEA grant, that an extensive population of mature women between the ages of approximately 25-55, whose families had grown, were ready to enter upon postsecondary education if appropriately recruited and prepared through a pre-admissions counseling program. IRDOE implemented the program via six workshop sessions at each institution involving a success-oriented self-actualization schema, role-model business and industry representatives presenting options and strategies for achieving goals, group counseling, occupational information (including job opportunities in nontraditional vocational areas), etc. The programs were repeated in the spring semester. After the fall cycle, 66 percent of the women who completed the Kingsborough program, and 100 percent of the women who completed the Bronx program, registered for courses. Community colleges in the New York City area have expressed interest in the program activity and results, and such out-of-town colleges as the Orange County Community College have visited and consulted with IRDOE on replicating the program for their areas.

Field-Developed Articulation

In keeping with priorities of the Regents Position Paper No. 21, The Articulation of Secondary and Postsecondary Education, IRDOE sought to demonstrate goal attainment through curriculum constructs designed to facilitate students' transition from high schools to community colleges. IRDOE implemented the cooperative development of curriculums between two community colleges and selected feeder high schools--Queensborough Community College with Francis Lewis, Benjamin Cardoza, John Bowne, and Bayside High Schools; and Monroe Community College with Greece, Edison Technical, and BOCES #2 high schools. The curriculums have been designed for presentation at the demonstration high schools, with college credit anticipated for demonstrated achievement, beginning September 1975. Curriculum areas expected to be included are Accounting I, COBOL (Data Processing), Introduction to Technical Math, and Survey of Technologies.

Implementation of Strategies for the Handicapped

The intent and design of the handicapped programs was to generate interest and action on the part of the community colleges with respect to the handicapped population. Specifically, assistance was provided to community colleges in implementing strategies developed at last year's conference relative to attracting greater numbers, providing better facilities for accessibility, and improving job placement. A partial list of outcomes follows: faculty orientation presentation on the disabled student leading to the immediate formation of an ad hoc collegewide action committee; formation of a disabled student committee on campus for feedback information on needs and actions; development of a disabled student coordinating advisor function at several campuses; initiation of special disabled student orientations and registration programs; organization of special programs for OVR counselors; and re-evaluation of cooperative student placements in terms of the unique needs of the disabled students on campuses.

Workshop Programs for the Development of Health Career Clubs

Continued explorations with SED last year yielded evidence of a need for the development of Health Career Clubs. In the fall of this academic year, IRDOE participated in planning sessions for the inservice training of teachers and administrators in advisory roles for health career clubs. Assistance was further offered for the spring workshops being planned and it was agreed that IRDOE would undertake the conduct of the initial workshop experience.

Occupational Training, Retraining, and Upgrading of New York City Municipal Personnel

CUNY's Urban Analysis Center established an Urban Academy for cooperative efforts with the City of New York in the training, retraining, and upgrading of the New York City municipal personnel. The Director of IRDOE was invited to participate on the planning council/steering committee co-chaired by a deputy mayor and a university dean. The intent was to apply IRDOE's capabilities to the development of a long-term program for revitalization of the city's operational offices. IRDOE's contributions beyond the foregoing included delineation of the steps to be taken in determining the nature of occupational education for the employees, the nature of the needs and task analyses required, and the steps in curriculum development. Additionally, research was conducted on the first undertaking of the Urban Academy: Payroll Clerks. Beyond literature review, IRDOE staff members made field visits to various payroll sites (e.g., agencies under various commissioners) and, in one instance, worked at a site as a payroll clerk to obtain hands-on evidence of needs, problems, etc. A curriculum has been developed for upgrading payroll clerks and several cycles of the course have been accomplished. The Urban Academy's next area has been projected: Purchase Clerks. Through the Center for Advanced Study in Education (CASE), a continuing working relationship with the Urban Academy is anticipated.

Bilingual Counselor Training (Occupational Continuum Format)

City University of New York has been conducting a bilingual counselor training program for the past 2 years. The program involves the attainment of a Master's degree upon successful completion of the program. Graduates obtain counseling positions in the New York City public schools, private schools, agencies, and colleges. Successful conduct of the occupational counseling continuum demonstrated by IRDOE in FY '73 and FY '74 led to requests for participation in the bilingual counselor preparation program. The intent was to enrich the traditional counselor training components with the emphases tested and proven viable at five community colleges; generally, they involved occupational information-giving skills, nontraditional organization structures, developing better awareness of the career planning needs of youth, assisting undecided youths and adults via such course materials as the "Psychology of Career Choice," etc. Forty-two graduates of the program this year will be influencing as many schools and agencies.

In addition to these specific projects, IRDOE assisted its sister institute at Cornell in the study of Women in the Two-Year College, provided evaluation services for the Computer-Managed Educational Technology program at New York City Community College, and assisted in evaluating the New York City Board of Education's Teacher-Tutor Pairs program.

Institute staff conducted three research projects complementing the "New Occupational Student: "Mature Adult Woman" project. These studies, scheduled for publication in the coming year, are tentatively entitled: "The Reduction of Stereotype Responses for Women on Career and College Major Scales of the Kuder Occupational Interest Survey," "Expressed Interest and Satisfaction with Inventoried Occupational Choices for Women Returning to Educational Training," "Occupational Interests of Re-entry Women with Traditional and Nontraditional Sex Role Attitudes."

As an outreach of the State Education Department's Office of Occupational and Continuing Education, the Institute also had an obligation to provide service to constituents seeking to improve programmatic, research, development, and dissemination endeavors. Accordingly, requests for such service were honored to the extent that resources permitted. The director and staff provided their time, and on occasion IRDOE-sponsored consultants were made available, for various activities including, but not limited to: speaking engagements; consultations with LEA's on in-house evaluations, research, and development projects; assistance in proposal development and conference planning; and curriculum development based upon IRDOE searches.

OTHER RESEARCH AND EVALUATION

A variety of research and evaluation activities were conducted under the aegis of the Research Coordinating Unit (RCU) of the State Education Department. These studies were "in-house" studies in that RCU staff members conducted the studies and wrote the reports. The need for each of the studies was originally expressed by the instructional bureaus in occupational education, or by units in general education, higher education, or continuing education. The activities are described in the following paragraphs.

Collecting and Reporting Chapter 241 Occupational Education Data From Buffalo, New York, Rochester, Syracuse, and Yonkers

The project purpose was to assure implementation of an annual district reporting requirement which will give the State information on the scope and results of occupational education services provided to youngsters in the five large cities during the regular school year. The State Education Department, Office of Occupational Education, currently collects data on local programming, and the staff of the Bureau of Occupational Education Research will make this information compatible and consistent with other Chapter 241 program information. It is anticipated that all data will be in and a final report completed by July 1, 1975.

Project Reachout (Drug Rehabilitation Program in Syracuse, New York)

The RCU is assisting the Project Reachout director in developing a formative and summative evaluation system. Goals and levels within goals were developed for the Project Reachout program. Objectives specific to each goal level were then developed. Observations and measures are now being developed and criterioned to the objectives, which are still being modified. The final product will be a formative and summative evaluation system which will be used by the project director and project staff to evaluate program effectiveness.

Cost-Benefit Analysis System for Cooperative Education

The New Jersey Department of Higher Education has sponsored a project to design a cost-benefit analysis system for use by postsecondary institutions in examining cooperative education. Definitions of cost units and benefit units were developed. Representatives of New Jersey postsecondary institutions having cooperative education programs were then surveyed for agreement and suggested modifications. The literature is being reviewed to determine a model for establishing mathematical relationships of cost units and benefit units. Observations and quantitative measures will then be developed for use by New Jersey postsecondary institutions having cooperative education programs.

Industrial Arts Teacher Education Graduate Mobility Study

The Bureau of Industrial Arts requested this project, to determine the graduates' rates of remaining in or leaving the field of education and the reasons for remaining or leaving. Data were collected through a survey from 1,796 individuals who graduated from the four New York State Industrial Arts teacher education programs between 1960 and 1970. The data indicate that 84 percent of the respondents found and remained in educational employment, and 72 percent of this group are currently employed as industrial arts teachers. Reasons for leaving employment in education appear to be a function of socioeconomic rewards which an individual finds in employment in business or industry. Reasons for remaining in education appear to be a function of personal satisfaction derived from the work. Correlates of age, institutional differences of graduates, time spent in an occupation, parental employment and education, and spouse employment and education need to be considered in order to analyze the reasons for differences. Summary data has been sent to respondents, to the Bureau of Industrial Arts, and through the Bureau of Industrial Arts to the four institutions in New York State which have industrial arts teacher education programs.

Study of Effects on Reading Achievement of Elementary School Students Exposed to Industrial Arts Publishing Centers in New York City

The RCU, together with the New York State and New York City Bureaus of Industrial Arts cooperated to determine how exposure to Industrial Arts Publishing Centers in New York City affects reading achievement scores of elementary school students. Data are being collected on: 1) time spent in the publishing centers; and 2) the 1974 and 1975 reading achievement scores of approximately 700 children in six elementary schools in New York City. Data collection will be completed by July 1975. The data will then be analyzed, controlling for ethnic background, sex, bilingual, and pupil mobility. Results of the study will be one influence in determining the use of Industrial Arts Publishing Centers.

EPDA Part F, Section 552 Leadership Development Training Program Evaluation

In a project sponsored by the United States Office of Education, the RCU worked on developing a formative evaluation system for use by 28 participant project directors and the National Advisory Council on Vocational Education. Program objectives were obtained. Attributes criterioned against program objectives were developed. Observational items criterioned against attributes are being generated. Developed items and guidelines for use will be field tested by 28 participant agencies to evaluate program effectiveness on post-baccalaureate students trained at the Masters and Ph.D. levels for leadership in vocational education. The final product will be a self-administered formative evaluation instrument and guidelines for using the instrument.

Other RCU activities included development of a self-evaluation instrument for use by industry-education coordinators, at the request of the New York State Advisory Council on Vocational Education; a development of instruments for evaluating teacher education workshops, and assistance in evaluating the workshops; editing of criterion-referenced test items; identification of factors influencing student performance in practical nursing programs; evaluation of the "Bread and Butterflies" video series on career education; analysis of the distribution of postsecondary occupational education funds in New York State from 1970-1975; preparation of a directory, Occupations Needing Credentials; a survey of the metric system in education in New York State; assistance in planning for the restructuring and regionalization of occupational youth organizations; a survey of occupational education in correctional institutions.

A related function of the RCU is to assist the Educational Programs and Studies Information Service (EPSIS) in supplying New York State occupational educators with timely, relevant educational information in response to their information requests. As a result of the dissemination of the RCU Newsletter over the past year, EPSIS processed 1,840 requests for abstract or microfiche copies of the ERIC documents cited in the newsletters. These requests from the newsletter readers represent 44.5 percent of all requests received by EPSIS for ERIC document reproduction. Requests were received mostly from school administrators and pupil personnel services staff in elementary and secondary schools across the State. Educators directly involved in occupational education areas and library/resource center staff were the next largest user groups. BOCES were the next largest institution user group. As a result of the RCU Newsletter distribution and presentations, both within the EPSIS office and in the field, the number of occupational educators having access to and utilizing the occupational education resources available in EPSIS is increasing.

The 1975 State Plan identified funds to conduct research activities for improving the quality of occupational education based on needs identified by an advisory committee of local administrators. Proposals for such studies were received from local administrators and will be considered for funding during the coming year.

EXEMPLARY

New York State's Part D - Exemplary funds for fiscal year 1975 were allocated for support of the career education models already described in the ELEMENTARY AND EARLY SECONDARY section of this report.

TEACHER EDUCATION

The study, An Assessment of Needs for Professional Personnel for Occupational Education in New York State, conducted by the Cornell Institute for Research and Development in Occupational Education in cooperation with the Office of Occupational and Continuing Education and the Division of Teacher Education and Certification of the Office of Higher Education, is for the purpose of establishing a more refined and responsive system for projecting future needs of professional personnel for occupational education.

Designed to be carried out in phases over a 2-year period, the objectives of the completed study are to assist in facilitating the following: recruitment of personnel for positions in occupational education; stimulation of professional development institutions in program development, emphasis, and change because of more realistic needs; a wider choice of options for personnel in preparational programs or planning to enter these programs; a more realistic choice of options

for advancement by professional personnel already in occupational education; more efficient utilization of scarce resources; more effective utilization of human resources; a more orderly replacement strategy for professionals learning the system.

Accomplishments of activities conducted during Phase I of the study in fiscal year 1975 resulted in the establishment of an advisory committee for the project consisting of 17 members representative of the educational sectors concerned with input to and findings from the study. A search and analysis of data pertinent to the study and available from a host of reporting systems was made for determining the extent and compatibility of data elements. Due to the complexity of data sources and total scope of the study to be covered, the search provided the basis for selection of specific elements, formatting of data, and identification of levels to be addressed in each phase of the study.

In 1974-75 work efforts focused on the public secondary, proprietary, and Department of Corrections sectors which employ occupational education personnel. A system design was developed to project future needs for professional personnel for occupational education at the secondary level in New York State. Comprehensive basic data on all professional personnel in occupational education at the secondary level were collected and displayed to provide profiles of personnel statewide and by regional occupational education planning areas. During the summer months a comprehensive testing and evaluation of the system will be performed utilizing the data from a 2-year period.

In 1975-76 Phase II of the project will focus on similar activities in assessing the occupational personnel needs at the postsecondary level.

Developmental work also continued on a comprehensive study of competencies necessary for teaching occupational education subjects leading to development of teacher education and certification programs based on the identified role of the teacher and the teacher's demonstrated role to enhance students' opportunities for learning. A strategy was identified, whereby a number of selected teacher education institutions will act as coordinators of consortiums for development of competency-based teacher education programs for the various occupational education program areas. Support for this strategy through Education Professions Development Act (EPDA) funding is provided in the fiscal year 1976 State Plan.

Progress in the development of preservice education related to career education was accomplished through the involvement of eight teacher education institutions in the career education inservice institutes funded through EPDA.

Cutbacks in anticipated EPDA funding resulted in elimination of two teacher education activities projected in the 1975 State Plan: inservice education for occupational and special education teachers relating to occupational education for handicapped persons; and inservice education for counselors, related to coordination and articulation of career guidance services among secondary, postsecondary, and adult occupational education agencies.

CURRICULUM

A major achievement in progress in the delivery system for occupational curriculum development was realized when an administrative reorganization in the Division of Curriculum Development, created a Bureau of Occupational and Career Curriculum. The bureau consisting of a chief, four professionals, and three secretaries centers the management of occupational and career curriculum for all levels from elementary to postsecondary and adult in one unit facilitating the coordination of activities and services as well as working with regional curriculum coordinators.

Funding, partial or total, of curriculum coordinators has continued. Presently, there are 25 individuals identified as having responsibility for coordination of occupational education curriculum at local and regional levels. Five centers with curriculum coordinators were funded to develop locally improved curriculum, effect articulated curriculums between levels of instruction, and when appropriate to develop curriculum with statewide application. An expressed concern for duplication in curriculum development effort emphasized the need for further coordination of curriculum with statewide applicability. Projects under development include typewriting syllabus revision with Nassau BOCES, shorthand syllabus revision with Buffalo City School District, basic electricity module with Orange BOCES and advanced electricity and residential and commercial wiring with Livingston, Steuben, Wyoming BOCES.

New York State, an active participant in the Northeast Network for Curriculum Coordination, hosted one regional meeting and was represented at two other sessions. Participation in this activity has resulted in an exchange of curriculum publications and a collection of curriculum materials from other states to be catalogued and made available for use and reference through a bureau resource center.

Twelve publications completed for printing or release include:

- Distribution and Marketing Syllabus - 14 modules from which teachers and students may select a first-year course in distributive education.

- Syllabus for Nurse's Assistant - The new syllabus provides a minimum content basis for development of a locally effective course of study by the teacher.

- Modular Design Approach for Agricultural Education and the companion publication Module Directory for Agricultural Education - Specific instructions for implementing a flexible program in agriculture and assistance in selecting from over 200 developed modules in designing program offerings.

- Diesel Engine Services - A component of the automotive services occupations for instruction at the adult or secondary level.

- Milling Machine Operator and Drill Press Operator - Additional releases in the Single Tool Skills for Machine Industries. Job sheets and drawings of shop projects are included.

- Economics and Management - Parts of the Certified Professional Secretary series to prepare experienced secretaries for the appropriate sections of the national CPS examination.

- Small Business Bookkeeping, Part II - An adult course dealing with the keeping of records in small businesses.

- Construction and Inspection - The last of a series to prepare technicians for State, city, and county highway departments.

- Curriculum Planning Guidelines for Homemaking/Family Living, Levels I and II - The beginning of a revision of the home economics program focusing on four subject areas and six content emphases. Modular in design allowing for local decisions to provide a flexible program.

- Secretarial Practice Syllabus - Revision consisting of eight modules of the Office Practice Syllabus adopted for secretarial practice with modules in stenographic skill development, related secretarial office procedures, office simulation and the in-basket technique, and job seeking and behavior on the job added.

- Medical Assisting - A syllabus of minimum content for education of students who wish to be employed as medical assistants. Local education agencies who wish to grant State credit for such an occupational education course must write a course of study based upon this syllabus but expanded in depth or breadth to accommodate local needs.

Five publications are near completion pending final review and refinement:

- Painting Services - Dealing with specific auto finish problems.
- Distribution and Marketing Series - Four modules as second level options covering approximately 10 weeks include Advertising Services, Travel and Tourism, Wholesale Distribution, and Credit and Collections.
- Universal Tool and Cutter Grinder - The last in a series of Single Tool Skills for Machine Occupations.
- Bookkeeping and Accounting I & II Syllabus.
- Core Apprentice Related Information - Units released as completed to provide related instruction for apprentices in a variety of trades.

Preliminary work was initiated in two additional projects:

- General Business Syllabus - Thirteen modules have been identified. Emphasis will be placed on simulations.
- Buying Electrical Appliances - Adult consumer homemaking programs.

GUIDANCE

During fiscal year 1975 Federal funds were used to support projects conducted by major cities and BOCES for the purpose of developing coordinated and articulated career guidance activities among secondary, postsecondary, and adult occupational education agencies in given areas of the State.

Five local educational agencies, representing different regions of the State were selected and invited to participate: New York City, Rochester, Suffolk County BOCES, St. Lawrence County BOCES, and Steuben, Allegany BOCES.

Each of the agencies is intended to be the first in its area to evaluate the state of local guidance activities in terms of available resources and existing and future community and student needs. With the assistance of local advisory committees some realistic goals are to be established and a method of achieving the goals devised. The purpose of this process is to create an innovative and efficient use of resources, to reach a substantial portion of the school population, and to create a smooth transition among educational levels. These procedures should be replicable in similar school districts throughout the State.

Occupational education administrators and guidance coordinators from the local agencies met with State Education Department personnel to clarify the intent of this activity and to develop a timetable for proposal development. Projects have been submitted for the first phase of operation by each of the agencies with the exception of Steuben, Allegany BOCES, which will require additional planning time. Briefly the goals of the individual projects are as follows.

Rochester's project is designed to develop an articulated K-12 career guidance program in terms of student behavioral objectives, to develop inservice training for counselors and administrators; to define educational activities appropriate to each objective; and to develop the required consultant skills. At Suffolk County BOCES a career guidance center is being established to develop articulated and coordinated career guidance services, including placement and followup for secondary students and adults and out-of-school youth.

In New York City three pilot schools are involved in: gathering information on career programs; assessing student interests, abilities, and aspirations; developing indepth counseling programs; providing staff development and training for counselors in order to upgrade articulation practices and career counseling in a team operation; providing the consultant services of the guidance counselors to teachers in the area of career guidance as an ongoing process; assisting counselors in setting up a career information service for parents; and developing a prototype of a team approach to career guidance which can be replicated in other school districts.

The project in Saratoga, Lewis BOCES involves 19 school districts and three occupational centers, and cuts across secondary, adult, and post-secondary levels. The first phase of the program involves establishing an advisory committee consisting of school officials, counselors, teachers, students and community members; developing a uniform tool for assessing the career guidance needs of the school districts; and instituting a public relations program designed to increase support for meeting the area's career guidance needs. The second phase focuses on increasing counselor awareness of guidance needs through offering workshops and special training sessions conducted by individuals prominent in the field of career education, and through distribution of reference materials from a professional resource center. In the final phase steps are taken to develop awareness on the part of teachers, students, and the community. The participating counselors and project director are to act as liaisons to the educational community in increasing awareness of the role of the career guidance process in the total career education program. Counselors are also involved in providing instructions to the educational community on the elements of career guidance and on utilization of all resources.

Federal funds were provided last year for partial support of placement and followup coordinators in Genesee, Wyoming BOCES, Monroe BOCES #1, Steuben, Allegany BOCES, Suffolk BOCES #1, and in the cities of Albany and Buffalo.

The duties most commonly performed by these coordinators included: providing employment information to guidance counselors, advising faculty of changing manpower needs of potential employers; conducting and supervising student followup studies; coordinating the placement program with the New York State Employment Services; preparing publications such as job directories, program brochures, and parent-student information booklets; and generally assisting students in moving into and progressing in the labor market.

Genesee, Wyoming BOCES, for example, reported the following accomplishments of the coordinator of placement and followup: conducting seminars with graduating seniors in which employment opportunities were discussed, mock interviews were conducted, and successful interview techniques were illustrated; locating almost 300 job openings; checking with employers on the progress of students hired from the BOCES, providing followup counseling to students who were experiencing difficulties on the job; and suggesting several curriculum changes which would improve the preparation of the students for existing employment conditions and opportunities.

At Monroe BOCES #1 the coordinator conducted followup studies designed to provide constant feedback on the quality of the occupational training and the relevancy of the curriculum content; assisted current and former students in assessing their qualifications for particular occupations; and developed good relationships between the BOCES, the State Employment Office,and private industries such as Eastman Kodak and Xerox.

In the city of Buffalo the placement and followup coordinator performed the following functions: developed a pre-registration self-evaluation test for students which aided both the coordinator and the students in selecting programs best suited to individual needs; updated information provided by the Buffalo Chamber of Commerce on area employers; insured that all students seeking employment after graduation were registered and contacted by the New York State Employment Office; obtained information on Federal civil service positions as a result of contact with the Supervisor of Federal Job Opportunities; maintained liaison with the Municipal Civil Service Commission; improved apprenticeship opportunities for cooperative work experience students by interacting with the Office of the Federal Coordinator of Apprentices; and attended various trade subadvisory committee meetings for the purpose of discussing employment requirements and opportunities.

HIGHLIGHTS OF EXCEPTIONAL OR MODEL PROGRAMS

SECONDARY

Multioccupational Program for the Handicapped

Dutchess County BOCES
R.D. #1
Poughkeepsie, New York 12601

The total occupational education program developed for handicapped students consists of several program components which offer sequential advancement from the very basic introductory training to the most advanced of the regular 2-year occupational education programs.

The first program is housed in the special education building and is taught by an occupational education teacher. This is the occupational education learning laboratory. This program consists primarily of a number of autotutorial machines and a small work shop area. The focus of the program is centered around the autotutorial machines which make it possible to individualize instruction and allow the student to advance at his or her own pace according to individual abilities. The student is taken through a series of introductory type programs which teach the name and proper use of many different types of hand and some basic power tools. The students in this program range from 9-12 years of age and are either educable mentally retarded, emotionally disturbed, or brain injured.

Next in the step-by-step progression is the multioccupational program which is housed in the occupational education building. While it is desirable that the students entering this program first complete the occupational education learning laboratory, it is not always necessary. A student who is between the ages of 13 and 18 may enter directly into the program upon the recommendation of the teachers and staff involved with the student. In this multioccupational program, the emphasis is again placed on individualized instruction and more involved exploration into many of the trade areas. This is done with the use of an evaluation system which is a completely self-paced interest and skill evaluation program, and through classroom instruction. With this program students may be introduced to and be evaluated on their manipulative skills as well as vocational interests in 17 different occupational areas. Again, the students proceed at their own speed according to their abilities. The areas covered include: metal working, cosmetology, bench assembly, office and clerical skills, drafting, electrical wiring, pipefitting, carpentry and woodworking, food preparation, air conditioning and refrigeration, merchandising, soldering and welding, health services, masonry, and sheetmetal. While autotutorial machines cannot train a student to become proficient or skilled in these areas, they provide them with an

introduction to certain tools, materials and operations which are part of the particular trade area. It is also possible to evaluate students with regard to any skill they may possess in these same areas. When the students are not involved with any of the equipment they work on projects related to the classroom instruction part of the program.

The third level consists of three 1-year prevocational exploratory courses. Students completing one of these programs may continue on in one of the regular 2-year programs depending upon their interest and aptitude. It is possible for a student who does exceptionally well in the multioccupational program and shows a real aptitude in a specific job cluster to forgo the prevocational course and move directly into a regular 2-year program. Several special education students have already done this and are doing quite well. Flexibility on behalf of students is not just a work but is the foundation upon which this program has been built.

Career Guidance Filmstrip

Nassau County BOCES
Valentines Road & The Plains Road
Westbury, New York 11590

The "Why Not?" filmstrip, along with a discussion guide, designed to help viewers expand career horizons of girls and women was completed. It shows women employed as office machine and telephone booth repair persons, a camera equipment service representative, a major appliance technician, an owner of a TV repair shop, a carpenter, a mason, a welder, and a manager of construction. It was produced with the cooperation of Sears Roebuck and Company, Raco Contracting Corporation, Bell Telephone Company, Eastman Kodak Company, IBM Corporation, Burke's TV, the United States Department of Labor, and Grumman Aerospace Corporation.

The filmstrip may be used by any teacher, counselor, or other person working with girls and women who are involved in the process of career choice. Though the filmstrip can be used alone, the counselor or teacher can increase the impact if the filmstrip is preceded and followed by a discussion of the materials included in the discussion guide. The 18-minute filmstrip, cassette tape, and discussion guide may be purchased from Nassau BOCES.

Audio-Visual Production Program

Putnam, Westchester BOCES
Pines Bridge Road
Yorktown Heights, New York 10598

Several new and interesting activities are being conducted in this audio-visual program which benefit not only the program enrollees but also the center and its other students. During the past year, the special education teacher brought an entire class of 10 severely retarded students with their equipment

to the audiovisual studio for 1 week of video taping. The class planned, video taped, edited, and recorded a sequence on the handicapped students. This will be used for inservice staff development helping teachers and students to better understand the retarded as well as to learn techniques for communicating with and educating this population group.

In cooperation with the BOCES curriculum center, the audiovisual class also provided technical services to local schools in the form of video taped programs and audio recordings. Additionally, the students worked in the BOCES graphic arts center and were involved in their activities as a supplementary experience to their occupational training.

Multiphased Occupational Program for Handicapped Students

Rochester City School District
13 Fitzhugh Street
Rochester, New York 14614

A four phased occupational program was provided to 130 students with physical handicaps such as: muscular dystrophy, cerebral palsy, cardiac problems, mental retardation, and visual and hearing impairment. Before entering the program the students were individually evaluated and tested for their occupational aptitudes and interests and provided counseling on their potential opportunities and limitations. The phases of the program consisted of: exploration and experimentation in a multioccupational laboratory, greater indepth exploration by each student in two areas of greatest interest; concentration in a single area with the possibility of a cooperative program or on-the-job training; and job placement and followup.

During the multioccupational phase, exploration and instruction was provided in a specially designed laboratory. In the area of production screen printing, the students participated in several large volume printing jobs. Through this type of instructional approach technical skills were acquired and mass production related problems were explored and solved. In electronics the students studied house wiring, soldering printed circuits, and television, radio, and stereo testing repair.

Photography instruction was conducted in a modified room with lower tables, nonskid floor, and easily accessible entrance for students in wheel chairs. The course content consisted of instruction and practical experience in camera use, film processing, enlargement, dark room techniques, and photofinishing. The students also learned how to use the large copy camera for making film positives to produce photoscreens for printing.

General assembly, appliance repairing, hot stamp printing, rubber stamp production, plastic engraving, and small gas engine repair were other areas in which instruction was provided.

Throughout all phases of the program close contacts were maintained with local industries. Students were involved in visits to industries and attended presentations by potential employers.

Coordinated Occupational Education Programs Between State-Supported Schools for the Handicapped and Public Schools

Vocational Education Act funds were used to support five occupational education programs serving approximately 112 students from State-supported schools for the handicapped. Each of these programs is a joint effort conducted by a State-supported school for the deaf or blind and a BOCES or city school. The handicapped students residing in the State-supported school received academic instruction in that school for a half-day. The students were then transported to an occupational facility at the cooperating BOCES or city school where they received occupational training in classes with non-handicapped students. Support staff were employed to facilitate the adjustment of the students and to coordinate various aspects of the programs.

Four of these programs served deaf students. The cooperating schools involved were: city of Buffalo Public Schools-St. Mary's School for the Deaf; Nassau BOCES-Mill Neck Manor School for the Deaf; Monroe #1-Rochester School for the Deaf; and Oneida #1 BOCES-New York State School for the Deaf in Rome.

In the fifth program, students from the New York State School for the Blind in Batavia are currently receiving training at the Genesee, Wyoming BOCES.

Expansion of this approach is anticipated to be implemented in other State-supported schools for the handicapped and increased enrollments are projected in the existing projects. Westchester BOCES and the New York State School for the Deaf in Westchester County are presently developing a proposal for a shared program.

POSTSECONDARY

Occupational Planning and Job Placement Program

Broome Community College
Upper Front Street
Binghamton, New York 13902

Previous to establishment of the job placement office made possible by VEA support, student job placement was a responsibility assumed on a personal basis by most department heads who provided direct supervisory control over the 20 occupational curriculums offered at the college. The new placement

office, with its full-time director, has now assumed this responsibility on a collegewide basis. Job placement activities were coordinated with department chairmen and a recruitment calendar created to meet the scheduling needs of all departments. In addition, students were provided assistance in developing resumes, given group instruction in interview methods, and provided individual aid in obtaining employment. During the grant period 395 on-campus interviews with students were conducted with 25 participating companies.

A Core Curriculum for the Engineering Technologies

Dutchess Community College
Pendell Road
Poughkeepsie, New York 12601

In recent years a general economic slowdown has reduced employment opportunities in a number of technical fields. One effect has been the tendency of potential engineering students to select education training in other fields. The impact of these decisions has caused some 2-year colleges to phase out these technical programs or to give serious consideration to doing so in the near future. Other schools, such as Dutchess Community College, have been encouraged to retain their engineering technology programs and to look at ways to produce a more economical operation. Many consider the ideal solution to be a modification of the curriculum which results in an improved educational process with a reduction in costs.

This project resulted in such a curriculum modification. The courses and materials developed under this project are to be used in the second-year curriculum options in mechanical, electrical, and electromechanical technologies. Each course was prepared using behavioral objectives as the basic format, with utilization such that each subject might eventually allow for self-paced instruction. Topics were unified and scheduled to appear at the most appropriate locations within the academic year to achieve maximum reinforcement.

Vocational Information Program

Auburn Community College
Franklin Street
Auburn, New York 13021

Based on a projected unemployment of 4,810 county residents in 1975, Auburn Community College established its Occupational Information Center with a view to making available on an outreach basis a variety of services which could enable persons to readily obtain job information or assistance as well as information on training opportunities available in the region. "Project Outreach" undertook to reach housewives, the retired, veterans, handicapped, rural residents and school dropouts, all of whom might possibly be seeking information on first or second careers or be considering a career change.

Nine communities in the county were selected for 1-day site visits. Other aspects of this diverse program were a film series--Professional-On-Call, Take A Person to Work, Career Days, Student Volunteer Services, and Career Decisionmaking Workshops. The "Professional-On-Call" program makes it possible for persons using the center to interview people in various professions on a one-to-one basis. A professional is defined as any person employed in the world of work--plumbers, secretaries, truck drivers, and others. Through the Take A Person to Work program, participants are offered the opportunity to learn about an occupation by spending a full or half day observing "on-the-job." Carrer Days highlights various "job families." During the Civil Service Career Day, a number of representatives from the Federal, State, county, and city civil service commissions were available on campus to answer questions and provide pertinent material on government occupations.

"Software for the Seventies," Instructional Materials Development Program in Fashion Buying and Merchandising

Fashion Institute of Technology
227 West 27th Street
New York, New York 10001

This program enabled the college to develop a series of modules permitting computer aided instruction to be used in courses offered in the curriculum fashion buying and merchandising. A series of individualized learning modules was created for the course: Merchandising Planning and Control, Fashion Merchandising Case Studies, and Merchandising Mathematics. The latter course consisted of 12 comprehensive instruction and review modules covering subject matter from the merchandise planning and control course.

Department staff underwent training in the use of the computer in instruction in conjunction with this project. The result of this inservice training was reflected in the effective utilization of the computer in supplementing classroom instruction, and the broad involvement of faculty in development of learning materials for their respective courses.

Developing Competencies in Instructional Technology for the Vocational Educator

Community College of the Finger Lakes
229 Bristol Street
Canandaigua, New York 14224

The objectives of this project were to introduce instructors of vocational courses to the various techniques of recognizing, developing, and evaluating new instructional methods and materials; to learn to utilize multimedia resources available in the educational communications field; and to motivate these instructors to extend their capability to develop instructional programs to meet their individual needs. Introduction to the multimedia approach to instruction by the utilization of "non-print" instructional materials was an important element in this project. Program participants

learned new methods available to them which are designed to increase the effectiveness of both the process of instruction and learning. The intended outcome is partly to increase the quality as well as quantity of instruction provided occupational students. Individual differences in the students' capabilities, entry levels, interests, and goals were taken under consideration and were compensated for through the development of individualized learning modules. The instructors who were participants in this project were made aware of the varied uses of multimedia, such as its use in introducing new course concepts and reviewing and reinforcing previous material, as well as the flexibility allowed for missed assignments and self-paced learning.

ADULT

Special Education Degree Program for Paraprofessionals

Two new courses, one of which included an on-the-job supervised practicum assignment, were developed to provide training for educational paraprofessionals who would be working with public school students who are handicapped. Courses were specially developed in close cooperation with various State and local agencies concerned with the handicapped, and included the active participants of an advisory group working with the project personnel to assist in developing the program. Students were primarily those employed in agencies responsible for providing educational services to handicapped students, and classes were conducted at agency sites for these employed paraprofessionals.

One course entitled, Learning Problems of the Handicapped, was conducted on the site of the New York Institute for the Education of the Blind, located in the Bronx section of New York City. All of the students enrolled in the course were employed by the agency. The course consisted of two sections, each of which met 3 hours a week. Courses were supervised by the college, and efforts were made to encourage students to pursue additional courses offered on the campus leading to an associate degree. A second course, Nature and Needs of the Handicapped, was also conducted and both courses were approved for college credit as part of the educational associate curriculum.

Educational and Job Skill Upgrading for Puerto Rican Seasonal Workers

Genesee, Wyoming BOCES
56 Harvester Avenue
Batavia, New York 14020

The focus of this project was to improve the skill training and basic education, including English as a second language, necessary to prepare 200 Puerto Rican seasonal workers for safe and productive employment in food processing plants.

This training improved the skills required by some employees in their existing positions and created eligibility for advancement in the food processing industry for others. The program operated from July through November in eight separate locations in the Genesee, Wyoming area.

This program was an excellent example of an integrated approach to serving the needs of disadvantaged adults. Several different private industries and public agencies cooperated in offering this program. The training, which was conducted by bilingual instructors, took place at the plant sites of the participating employers, C-B Foods, Comstock Foods, and Birdseye Foods. Financial support was obtained from a variety of sources. Federal occupational education funds were provided for the job skill and occupational upgrading components. Funds provided through the Division of Continuing Education supported the English as a second language and general education portions. Stipends for the trainees were provided by the employers and by Program Funding Inc., which also operated a recreation program for the trainees. The Bureau of Migrant Education in the State Education Department assisted the BOCES in designing the program curriculum.

Prevocational Education Program at the Brooklyn House of Detention

New York City Community College
300 Jay Street
New York, New York 11201

This program provided a three-cycle series of prevocational coursework, counseling, and job placement services for inmates confined to the Brooklyn House of Detention. All classes were held at the House of Detention, in a section on the sixth floor which was converted into a learning center specifically for this program. Initial applications for the program totaled 274, with 186 interviews and tests conducted which resulted in 104 inmates being accepted into the program. The college was able to provide basic literacy instruction for many students who, by means of the testing program, were found to have less than a seventh grade reading ability. The prevocational program consisted of courses in business communications, career directions, computational work skills, and vocational orientation/life skills.

A counselor was assigned to the program and wherever possible assisted the released offenders in obtaining employment. Counseling was provided on an individual basis throughout the year. Contacts were also initiated by this counselor and referrals made to such agencies and programs as Project Rebound, Manhood Foundation, National Alliance of Businessmen, Office of Vocational Rehabilitation, Fortune Society, and five other organizations devoted to assisting released offenders.

Building for Educational Skill Training (BEST)

Steuben, Allegany BOCES
47 W. Steuben Street
P.O. Box 381
Bath, New York 14810

A new program for disadvantaged adults was started in this area to train and retrain unemployed and marginally employed rural residents. Adults were recruited for a 48-week onsite training program in the construction of low cost new housing and the rehabilitation of old existing buildings.

It became evident that employment opportunities in this rural area were confined to factory work, farm labor, and related service industries. The major factory employers could not absorb all of the available labor supply and mechanization over the years tremendously diminished the need for any farm workers. There has been, however, a substantial demand for skilled tradesmen in the area in conjunction with the large housing demand. Because of this fact, a work experience program was developed in an attempt to recruit persons in need of raising their income.

The training program consisted of framing, carpentry, masonry, interior finish, tile work, dry wall construction, house wiring, and plumbing. Preemployment instruction counseling, and placement were provided to assist adults in securing employment which would raise their income above the poverty level. Backup counseling alerted the agency to other educational requirements for employment a student needed, and psychological and social barriers preventing these persons from maintaining gainful employment.